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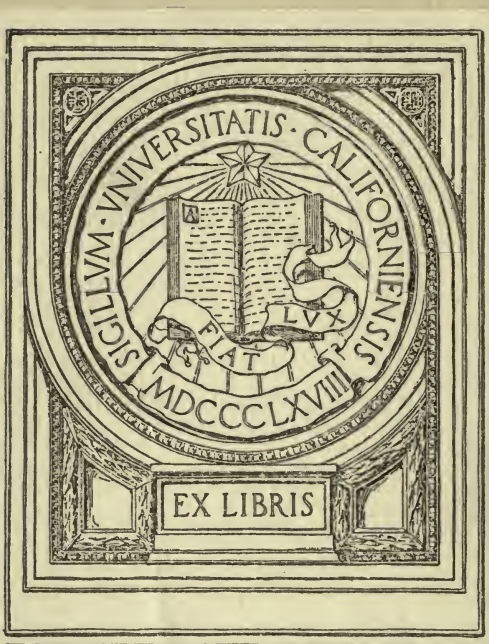
FOR
COMMUNITY NEEDS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MOTION PICTURES
for
COMMUNITY NEEDS

A PRACTICAL MANUAL OF INFORMATION
AND SUGGESTION FOR EDUCATIONAL,
RELIGIOUS AND SOCIAL WORK

BY
GLADYS BOLLMAN
AND
HENRY BOLLMAN

NEW YORK
HENRY HOLT AND COMPANY
1922

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PREFACE

When the schoolman, the churchman or other community worker undertakes to use that most powerful educational instrument, the motion picture, he becomes, *ipse facto,* a motion picture exhibitor. He immediately faces problems similar to, though not always identical with, those of the motion picture theatre manager. Upon the exact solution of these problems depends the effectiveness of his picture-showings.

Ten thousand schools, churches, and similar community institutions have motion picture projectors to-day, and to-morrow will see another ten thousand in use! The value and the success of this development depends in no small measure upon the dissemination of exact information as to source and supply of suitable films, together with practical advice on their use.

The day has come when arguments favoring the use of motion pictures in religious and educational work are no longer necessary except to the most conservative. It is rare to find an educator who is not interested in this important branch of visual instruction, a clergyman who does not believe in the power of the screen. The difficulty is

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to find the right film for the occasion, and to solve the mechanical problems of projection.

It is our hope that this volume will place in the hands of the non-theatrical exhibitor a key to the showing of motion pictures in such a way that the maximum results may be derived.

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PART I
PAST AND PRESENT

CHAPTER I

THE MOVIE WINS

One day, when the world had grown old, and people went about saying that the time was out of joint; that the pipes of Pan were no more heard in the land, but only the whirring wheels of industry and science; that the muses had betaken themselves to the most remote clouds, where not even an airplane could follow them, Apollo, God of beauty, patron of the arts, and something of a trickster, visited the earth to find the reason for the complaining and crying. And when he had visited the earth, he returned to Olympus laughing behind his lyre. "Foolish mortals," he said, "from their daily tools and machines, from their alternating currents and their celluloid, have they created a new art and they know it not."

Some still refuse to admit that the motion picture is more of an art than photography or printing, calling it only a means of scientific record, a means of spreading knowledge. Others consider it comparable to the discovery of language—a wholly new means of communicating thought. To these latter it is an art. But call it a new art, a

new tool, or what you will—the motion picture as a means of expression has come to stay.

The first important attempt to produce the illusion of motion was by way of a toy—a cylinder on which were pictures of the same object in different positions. When rapidly revolved, the illusion of motion of the object was produced. This attempt was made in 1860. An approach from a different angle—to record actual motion, was made in 1872, when Edward Muybridge tried to record the movements of a trotting horse by taking a series of photographs with twenty-four cameras, at rapid intervals. From the combination of these two ideas has resulted the motion picture. The perfection of the idea, the real inventions which made it possible are the work of Edison, Eastman, and Goodwin.*

It is from 1895 that the real career of the motion picture as we know it dates. Ten years

*The following letter from Mr. Edison appeared in the New York *Times,* June 9, 1921:

To the Editor of the New York Times:

The writer of Screen News in your issue of June 5 does me an injustice in citing a lot of claims tending to deprive me of the honor of being the inventor of the modern motion picture. The injustice arises through a misunderstanding.

The basic invention was the Kinetograph, which was an instrument for recording ("taking") motion pictures, as now used. It was not the apparatus for the reproduction of the pictures, enlarged, on the screen. It is on the projecting machine only that the claims of others can be based, as this is the same as the recording instrument with several attachments to adapt it for screen purposes.

At first I put out several hundred reproducing machines

later in 1905 the first motion picture theatre—the Nickelodeon—was opened in Pittsburgh, and here a one-reel picture was shown to about seven thousand people a day. At the present time (1920) it is estimated that 11,000,000 people see motion pictures every day.

The early motion picture made no attempt at realism. Stage scenery was used. Exteriors and interiors were lighted alike. The story was made up as the play went along. The actors were far from being masters of their art.

The subject-matter was sensational on the one hand, and insipid on the other. The earlier screen stories abounded in the criminal and the mentally defective as characters. Situations were of primitive simplicity, often not bearing at all upon modern life, or in fact, the life of any civilized period. Ghosts appeared frequently and took an active part in the story. Retribution, by all kinds of violent death, was common. The forces of nature

which reproduced the pictures with but little enlargement, and I was starting to make the additions to the recording instrument to adapt it to greater enlargement for projection on the screen as we now see it, when Mr. Armat presented to my agents a better device for projection than I had at the time. Soon afterward Lumiere, of France, used my recording instrument, adding another and different kind of device to adapt it for screen enlargement. These reversed recording machines were introduced commercially as Projecting Machines, but the additions and changes were merely detail improvements on my prior and basic invention, namely, the Kinetograph, or Recording Machine, under which I claim to be the inventor of the modern motion picture.

THOMAS A. EDISON.

Orange, N. J., June 8, 1921.

—fire, storm, and death,—took an active hand wherever the story demanded it. One must return to a kind of literature that is seldom discussed in books to find a parallel. Anything, so long as it moved!

The presentation was scarcely better than the preparation. Any old store was good enough to house this curiosity. Later, any vaudeville—and the motion picture was often presented as part of a coarse and objectionable program. The tendency was then, of course, for the producers to supply a kind of picture suitable for that kind of audience. And thus for many years the motion picture remained in a fairly low state of development except from a mechanical point of view.

The theatre at first made no effort to attract educated people. The producers of motion pictures made no effort to appeal to them. The great mass of picture-goers were those millions who follow the crowd without discriminating. The theatres were full, the box-office receipts satisfactory, and the commercial exchanges could rent almost any picture they cared to produce. Gradually, however, by luck or by design, pictures of real merit, real discoveries in the use of this wonderful new medium of expression came to be produced, and a new clientele of the better type of people was created. Many a conservative was brought into the fold by the Durbar pictures. The " Birth of a Nation " added still more, and

even today any great picture has the same striking effect. Little by little the audiences and the pictures have interacted on each other, so that all audiences now demand better pictures than they used to do, and every now and then a picture is produced which attracts a greater proportion of discriminating people.

The motion picture now has a real place in public esteem. The United States Government has indorsed the motion picture one hundred per cent. It helped win the war. It is now being used in many departments. It is the subject of important bulletins. Institutions and societies are using it to spread propaganda, to win support, to educate. Churches, schools, clubs, industrial organizations, are clamoring for suitable material. Educators and social workers are loud in their praises of what it has done, and their conviction that it can do still more.

Reputable publications deal with it in special departments, in articles, and in fiction. Several magazines are exclusively devoted to its educational aspects, to say nothing of the vast amount of trade and " fan " literature which is published.

Every one " goes to the movies "—not only grimy little street gamins, but also ladies in sables and silks who come in limousines after a late dinner, and university professors who deem a visit to the motion picture worthy of a well-considered expenditure of time and money. The motion pic-

ture is no longer a curiosity, a "turn" occupying five minutes, but an evening's entertainment, a scientific demonstration, a powerful sermon.

It is housed in specially built theatres, equipped with every conceivable convenience and luxury, accompanied by symphony orchestras, presented by experts in projection and management. It stands on its own merits. It has risen from an understudy to another, as did the automobile, to a place and a technique of its own. It has discarded the traditions of the stage as the automobile dropped the ideals of the horse-drawn vehicle.

In its production, the motion picture draws upon the whole earth for its resources. Technical experts of all sorts—architects, historians, directors, authors, artists, musicians, cameramen, advertising men—can be lured from the most exalted positions elsewhere by reason of the enormous salaries paid in this prosperous industry and because of the unlimited opportunities for initiative and originality. Studios equipped with every conceivable device and covering acres of ground run at top speed to supply the ever-increasing demand. Experimenters are at work to discover possible improvements. There are no corners of the earth too remote, no enclosures too sacredly guarded for the cameraman to enter. Unlimited money, unlimited courage, and unlimited interest are characteristic of the followers of the industry and of the art. And a few have real ability. And

the reward is success. The industry is "booming," is possessed of wealth and power almost beyond imagining.

The motion picture has grown as un-self-consciously as an infant. And like an infant, it has developed a strong healthy physical organism. It is now at the point where, having played happily and somewhat aimlessly for the years of its life, it is beginning to acquire individuality, to work, to become self-conscious in the best sense, with ambitions, efforts, and interests in many directions besides those of play.

CHAPTER II

THE DEVELOPMENT OF THE EDUCATIONAL MOTION PICTURE

THE efforts of the motion picture toward development in the educational field have been intermittent, but they have continually grown more clearly defined and more powerful. A definite recognition of this development was made when the National Education Association meeting in Cleveland in February, 1920, officially pronounced the motion picture sufficiently mature and responsible to take a hand in the world's education. One entire session and several informal conferences were devoted exclusively to it. Exhibits were shown. A Department of Visual Education was established.

The first educational pictures were produced because a certain type of subject-matter was cheap and easy to obtain. Unfamiliar facts of nature proved acceptable to the public in a popular form, and to secure a picture of Niagara Falls, for instance, was cheaper than to hire and train a cast of actors. Furthermore, the wide use of the slide proved that there was a market for this sort of picture. Accordingly, there were pictures

of animals, pictures of scenery, pictures of public happenings, pictures of unfamiliar parts of the earth, pictures of curious discoveries. In such pictures were laid the foundations of scientific, travel, and industrial pictures, and of news reels.

The producers early also turned to the classics. The Bible and Shakespeare frequently suffered from crude efforts at picturization. Tennyson was also a favorite. These early attempts are most interesting, but they seem to have been premature. At the time they were produced, the audiences for whom they were destined had not accepted the motion picture. Unfortunately, they are too crude to be of any use today, when the audience is ready to receive them. Are producers afraid to try again because of early failures?

In the increasing accuracy of the films we see also the movement toward making the motion picture educational. The earlier historical dramas, of which there were many, were surcharged with anachronisms and did almost more harm than good. The classic example is the drama which showed a portrait of Lincoln on the wall of George Washington's private office. Medieval highwaymen operated on smoothly paved roads, with curbstones, sewer gratings, and electric poles in the background. Racial characteristics and local color were indicated in a way which hardly fell short of caricature. Literary masterpieces were reproduced in almost any way which suited

the director's fancy or the stock of costumes in the green room. Distorted interpretations were given—an evil which to some extent has yet to be corrected. Producers make free with the happy ending on all occasions, and one need never be surprised to see a glaring poster such as

OLD KING LEAR—THE MERRY OLD DEAR

Come and see how the playful whims of three maidens lightened the monotony of old age and restored youthful animation to a withered frame. Most stupendous production of the age, etc.

One producer states quite frankly that he "gilds refined gold, paints the lily," and otherwise improves on the original.

It is easy to see how valuable to the public is a motion picture which is beginning to correct these evils, which lets us look sympathetically into the life of other times and of other lands, which interprets for those to whom the printed word says little, the great masterpieces of all time, and the great moments in history. This attitude of sympathy and of accuracy is now uppermost. During this last year several great masterpieces have been screened, and, so far as we can tell at this early stage of the motion picture, screened adequately.

The movement for original screen stories to replace revamped stage plays and novels will

probably bring photodramas more unified, more reasonable, and more coherent, as well as more original and genuine. This will perhaps not operate directly to bring us educational pictures, but it will lift the status of the motion picture in general, and win increasingly the interest of thinking people.

The real self-conscious development of the screen for educational purposes, however, is now being brought about by the entrance into the field of production of many educators and scientists.

Scientists have since the beginning taken a warm interest in this new instrument. That Thomas Edison is perhaps its greatest advocate, has given it a "gilt edge," as it were. Many other notable scientists consider it a valuable means both of investigation and of instruction. The first films were largely on scientific subjects. Some of the most important steps were taken by the Marey Institute in Paris. To this Institute the motion picture is indebted for some of its greatest discoveries. One of them is X-ray cinematography, produced by Carvallo after many attempts by other scientists. Many remarkable records have been made by this process, notably records of digestive processes. Another discovery, of immense value to science, is that subjects can be photographed in motion, through the microscope. As a result, we have vivid pictures of the life of a drop of water, of blood corpuscles and disease

germs, of the formation of crystals, of various chemical and physical processes. The telescope, too, may be used in connection with the motion-picture camera, and the uses of this discovery are many, one of them being its military advantage.

One of the most sensational devices is a submarine camera operated from the surface which can make discoveries impossible to human research. By the use of powerful lamps, pictures may be taken at a depth beyond that accessible to a human being, and the discoveries made by this means have been extremely important.

The motion-picture camera is able to take pictures in darker conditions than the ordinary camera, which is also of obvious value, because of its rapid lens.

The "slow-motion" camera, which takes one hundred and twenty-eight pictures per second, instead of the usual sixteen, resolves the motion into a greater number of its component motions than does the average camera. This is what the average motion-picture camera does with relation to the eye, so that the "slow-motion" camera is simply a step further. By projecting the film at normal speed, one may study the motion in detail. These pictures were first presented in America as an amusing novelty to the public, which was heartily amused to see a violently energetic tennis player rising slowly into mid-air with the languid grace of a balloon. These analyses of motion,

however, speedily were recognized as being of educational value, and they now show many scientific subjects. They are also used by efficiency experts and engineers in studying motion for the purpose of eliminating waste motions.

The discovery of processes whereby a film can be shown at a surprisingly short interval after its exposure has been partly responsible for another form of educational picture, the news reel. Recently a film was shown one-half hour after making it. With such a device, we may some day see the trainloads of commuters getting their morning news from a film instead of from newspapers. At any rate, the news reel as a real news carrier, is firmly on its feet, and many people whose comprehension of the printed word is limited receive most of their ideas of the world today from the screen.

The first news weekly appeared in 1901. At first the subject-matter was largely sensational and sporting, but today a larger percentage of the reel is devoted to the more serious news, and even an editorial tone is given by the appearance on the screen of brief paragraphs of comment and public opinion.

From the news weekly developed naturally another form of educational—the "magazine"—which holds one of the best solutions of the problem. The producer of a magazine secures material of all kinds—generally that which does not

lose its value because of its ephemeral quality. He then makes up a one-reel screen magazine of three or four subjects and issues such a magazine every week. At the end of a year or so he has a library of extremely valuable material of all kinds, which may be coördinated and retitled if necessary to suit various purposes. The reels then are more specifically suited to the special audience rather than to the theatrical or general audience. While it is to the interest of the producer to separate this material into the serial form for the theatrical exhibitor, he will find it advisable to patch it together again later for use by the non-theatrical user after its novelty has worn off and it is to be devoted to a definite instructional purpose.

We quote the contents of two or three typical magazines:

I. Pau, France; Lighthouses; Ants; Facial Study (slow motion); Hurricanes in Harness; U. S. Bureau of Standards.

II. Roughriders of the Amazon; The How and Why of Your Differential; Animated Cartoon.

III. Chimpanzee in Zoo; Mikado, Japan (color); Circulation of the Blood; Sugar in the Making, Java; Stunts and Thrills (slow motion).

The educational film is no longer dependent on the commercial producer. State and federal movements for betterment employ the screen in

spreading propaganda. Individuals see the possibilities and appropriate this means for developing their own specialties. The preacher sees a powerful moral on the screen. He becomes interested. And as a result we are beginning to have films made by preachers for preachers. The school-teacher, the physician, the scientist have done the same and having made films, have found an increasing number of uses for them. Or, if he can not make his own, he bethinks him of an old weekly or magazine seen long ago which makes the point he wants. And that picture which was once merely recreational, or at best educational in a haphazard general way, has now become strictly utilitarian.

Thus the "movie" after its period of play, has now begun to do the world's work.

CHAPTER III

PRODUCTION

THE sources of production are many and increasing in number every day. The largest source is still the commercial producer who makes his picture for the theatre. Although his directors are often genuine artists, he makes his picture primarily to "*sell,*" and no trouble or expense is too great if it insures the monetary success of the picture in the theatres. He salaries his stars in terms which would make a Rajah gasp. He pays his directors in equally large sums. He reproduces any of the seven wonders of the world without hesitation, if by so doing he can create a "stupendous, epoch-making, unparalleled sensation"—and tears them down in three months without giving them a second thought. He purchases for sums in four or five or six figures the rights to popular plays or novels—for their notoriety—and indeed may publish or produce such a "best-seller" or Broadway success just for the advertising possibilities. Publicity is energetically sought on all occasions and the good-humored public keeps up the game by its interest in the personal affairs of screen folk. New producers

are entering the field continually, sometimes only to make one picture and retire with their " pile."

With such a background and such a purpose, it is not strange that comparatively few theatrical producers furnish material of interest to the seeker after the educational motion picture. There are an increasing number of clean, wholesome, harmless stories—" features "—which grow better every year. They correspond to the great mass of periodical literature with which the tired business man is supposed to rest his mind. These features are most often comedy dramas—full retribution for the villain, ample reward for the hero and heroine. Then there is the drama of success, in which the reward is really won; the drama of spiritual struggle in which a character is developed; the drama of pure plot, in which circumstances finally resolve themselves propitiously. According as these are well done, they find uses beyond the one for which they were originally intended. Many are found which will be of use to the church or school seeking wholesome entertainment. There are also the " superfeatures " or specials, whose superiority lies generally in their expense and length, rather than in any inherent merit.

Tragedy is not popular on the screen—although perhaps the screen's greatest play, " Broken Blossoms," is a tragedy.

The serial, which occupies an important place

in the commercial end of the industry, does not concern us. The episodes which run week after week in the cheaper neighborhood theatres are always sensational and often utterly preposterous. But they are seldom really harmful, and although they do not tend to elevate the standard of taste, they often develop the motion picture in a technical way, and fulfil the cravings of the less sophisticated for adventure. Thrills, suspense, and lightning action are demanded of serials. Each episode must leave the audience gasping as the hero is left suspended over a lofty cliff with the villain about to cut the rope. At this moment the episode ends, and the audience must return next week to continue the story. A touch of erudition is often attempted by the advertisement that such a serial is a powerful study of hypnotism, a marvel of engineering, or of physical prowess, and while it may be, it will not be exactly educational, nevertheless!

Of most comedy, the less said the better! But there are comedies which afford clean and funny entertainment and occasionally a tactfully presented "moral." Suggestions for such comedies may be found in the section of programs. There are certain classes of comedies which may be condemned wholesale, and the person who keeps in touch with the film market soon learns to recognize these. Comedies are improving all the time. The Drew comedies were almost all very fine,

and are still available. The comedies of Mrs. Drew continue the tradition. Other excellent ones are those of James Montgomery Flagg, Briggs, Harold Lloyd, and Booth Tarkington, not dependent for their humor upon custard pies and absurdly fitting clothes. The motion picture affords to comedy the greatest boost it has had in centuries—it can produce a tempo almost impossible on the stage.

What then is to be found in the commercial releases for educational use? First, the screen interpretation of literary masterpieces, great dramas, and historical events. Such are "Les Misérables," "Dr. Jekyll and Mr. Hyde," "Treasure Island," "Romance," "My Own United States" ("The Man Without a Country"), and many others. The screen can reproduce a novel better than can a play. And as a means of introducing the classics to the masses, the screen is unequaled. Each production of this kind is a law unto itself, however, and must be judged individually, as some of them are appallingly bad.

A second class of educational pictures made by the theatrical producer is the travelogue or scenic. In this field, too, each picture must be judged on its own merits, but as a rule the scenics and travelogues contain material which may be of great use to the teacher of geography, geology, sociology, economics, art, etc.

Thirdly, are to be found nature-study pictures —the life of plants, animals, birds. These, although made for a theatrical purpose primarily, are especially apt to be valuable, as they are necessarily made by persons with an intimate knowledge of the subject.

Fourthly, there are the screen magazines and weeklies. We have already discussed these. A school or club, for instance, can scarcely go wrong in booking a screen magazine or a news weekly straight through the year, for they offer an inexhaustible mine of information and material suggesting further research. In the section of suggested programs, it will be noted how often they fit into a program for a particular purpose. The weeklies plan to have suitable material for patriotic holidays, and others.

Besides these, there is an occasional drama featuring some novel situation or locality of educational interest. One such feature has as its distinction under-water scenes, another a volcano in action, etc. But the educational content of such films is small in proportion to their price, and may be gained in a simpler, more suitable, form in the short reels, as a general thing.

Another source of production is the maker of advertising or industrial films. Many large manufacturing concerns have had films made depicting their business activities, methods of production, the quality of their goods, and similar sub-

jects, with a view to exhibiting them in theatres. Very elaborate pictures, well acted and directed, are frequently made in this connection. They offer a fruitful field for the non-theatrical user.

Theatre owners have lately taken a firm stand against the use of industrials. They find that audiences resent the use of advertising on the screen—even though it takes an elaborate form, with real dramatic, educational, and artistic value. Only the poorer theatres in outlying districts are willing to jeopardize the popularity of their houses by showing industrials, in return for fees from the advertisers. Owing to this reluctance of theatre managers to use it, the industrial film has gone a-begging. Advertising managers who plunged eagerly into screen advertising find themselves with a stock of films representing an investment of thousands of dollars, and the theatre doors closed to them. They will gladly supply them to non-theatrical exhibitors free of charge.

The best of industrials contain little or no specific advertising matter. The *Ford Weekly,* for instance, contains no reference to the Ford Car except in the title "Produced by the Ford Motor Company." It is one of the best one-reel pictures now on the market, and was welcomed in exception to the statement above, at almost all theatres, previous to Ford's Anti-Semitic utterances.

The educational material of this sort may be

valuable in three ways: (1) exposition of a trade or industry; (2) exposition of factory and labor conditions; (3) extraneous matter, as for example, local color in a film showing silk industry in Japan.

Under this head also come films made by the publicity committees of various communities, which show the industries and public utilities of a town or city, and the conditions under which its people live and work. As it is usually the most progressive and beautiful communities which do this sort of thing, these reels are often very valuable.

A third and increasingly important source of production is the propagandist. A social or charitable organization wishes to record its activities, that it may secure further support and spread its principles. Films of this description have been made, for instance, by the humane societies, the Red Cross, Safety First movements, Good Roads advocates, etc. The government used films also for propagandizing to a great extent through the war. Such films are produced usually by a small independent company, and are then turned over to the organization for whom they were made, for distribution.

Another source of production, also growing rapidly, is the professional organization. Medical films, dental films, arts and crafts films, military films are made for and by specialists along

these lines, and used for instruction. These films are made by authorities and are almost always reliable as far as knowledge has increased—of course they may go out of date, as does a text book. Classes in surgery, in physics, in electricity, in art, are coming to have their instruction more and more through the motion picture.

All of these sources of production are liable to combine at times. A commercial producer may make and distribute a series of government pictures, a screen magazine may contain bits of propaganda or scientific material made for a society or a state. The exhibitor who would have accurate information about the film market must keep his eyes open early and late, but he will be rewarded by having at his disposal an enormous stock of educational wares which even today, with proper care, can be made to supply almost every need.

CHAPTER IV

GOVERNMENT MOTION PICTURES

ONE of the most important sources of educational motion pictures is the United States Government. The films obtained from that source have many characteristics of value to the non-theatre exhibitor. They are accurate, unbiased, adequately treated, and they are FREE. Government films are supplied at no expense, except transportation. You are not permitted to charge admission to showings of these pictures. The government is very strict on that point.

An admirable summary of government motion-picture activities was presented in July, 1920, by Fred. W. Perkins, Assistant in Charge of Motion Pictures, Division of Publication, U. S. Department of Agriculture, before the National Academy of Visual Instruction, Madison, Wisconsin. We submit the following extracts from Mr. Perkins' lecture:

"Motion picture work of various kinds and magnitudes is being done by the Signal Corps and the Army Medical Museum of the War Department; the Bureau of Navigation; the Recruiting Division and the Marine

Corps of the Navy Department; the Bureau of Education; the Reclamation Service; the National Parks Service, and the Bureau of Mines of the Department of the Interior; the Public Health Service; and the War Risk Insurance Bureau of the Treasury Department; the Children's Bureau of the Labor Department; the Bureau of Standards of the Department of Commerce; and the Department of Agriculture, in which the motion picture work of the Department's seventeen bureaus are united under a single organization.

" I represent, of course, only the Department of Agriculture, but I have obtained information on the activities of other agencies that you may wish to know. First I shall read a statement furnished by the Signal Corps, which, by reason of its energetic efforts during the war, is up to this time the largest producer of Government motion pictures:

" ' The Photographic Section of the Signal Corps at Washington, D. C., has in its files approximately one million feet of motion picture film and forty thousand still photographs taken during the World War, both at home and abroad, by the official Signal Corps photographers. This film and the photographs cover all phases of training and action on the ground and in the air, showing in the clearest possible way the part taken by the United States in the World War.

" ' The motion picture film is handled by the Photographic Section, Signal Corps, as a direct sale to the public at the rate of 10c per foot, positive print (which is the film used for projection on the screen), and 80c per foot for duplicate negative (which is the film from which reproductions or copies are made).

"'Still photographs are sold at the following rates:

"'Size 6½ x 8½ inches.....15 cents per copy

"'All sales are made on a cash-with-order basis; certified checks and money orders should be made payable to "The Photographic Section, Signal Corps, Washington, D. C."

"'A large part of the educational film produced by the Signal Corps, has been turned over to the Bureau of Education, which states that "the war film in circulation covers a fairly complete review of the war."'

"A statement furnished by the Reclamation Service, but giving information on the motion pictures of other bureaus in the Department of the Interior, reads as follows:

"'In the Department of the Interior motion picture films are utilized for publicity and educational purposes by the following bureaus: Reclamation Service; Mines; National Parks; Education. Only two of these, Reclamation Service and Mines, are equipped to make films. These are constantly adding to their stock of negatives and are endeavoring to keep the work of the Government up to date.

"'Each bureau controls the distribution of its own films, but all are coöperating with the Section of Visual Education of the Bureau of Education by loaning available films when requested.

"'The Reclamation Service, the activities of which are scattered through fifteen Western States, has projected many thousands of feet of film covering the following subjects: Engineering, land development, irrigation,

drainage, home building, schools, agriculture, horticulture, marketing, road building, scenic and recreational.

"'The natural resources of the Great American Desert are fully portrayed and numerous reels have been made to illustrate how the desert is being reclaimed.

"'Owing to the fact that Congress has not seen fit to make appropriations in the Reclamation Service for projecting film, it has been necessary to arrange for funds through contributions of organizations and associations which are interested in promoting this work. These contributions have been sufficient only to provide for the making of the negative and two reels, and circulation is therefore restricted. Additional reels have been ordered from time to time as requested by various associations like the Red Cross, Y. M. C. A., and the railroads.

"'The demand for our films is always in excess of the supply. It is most regrettable that only a limited circulation is possible because these films have a real educational value and illustrate many interesting features of western development.

"'The Service, and I believe the other bureaus of this Department, will be glad to coöperate in the work of your institution in every possible way.

"'We will be pleased to assemble negatives of all subjects and furnish prints at cost. We will furnish the data relating to these films, and, in so far as the regulations permit, will lend our aid to the good work you are undertaking.'

"The Bureau of Education, which coöperates in film distribution with the Extension Departments of the State Universities, in the annual report of its visual instruction section says:

" ' The Visual Instruction Service of the Bureau of Education, Department of the Interior, received 2,160,000 feet of film during the fiscal year ending June 30, 1920, and deposited 982,000 feet with its state distributing centers. This section now has a total of 8,275,000 feet of film, 4,927,000 feet of which are in circulation, and the remaining 3,348,000 are held in the vault to be repaired through the very courteous coöperation of the Departments of the Government, of Allied Organizations and Industrial Companies.

" ' The distribution of films has been carried on through the extensive coöperation of the Extension Departments of the State Universities, which act as distributing centers for their respective states, and are held responsible for the proper circulation of films in their own territory. It is to be understood then, that this section does not send out films direct to users from this office, but releases and deposits such film material as becomes available with its state distributing centers, where universities, normal, high and elementary schools, churches, Y. M. C. A.'s, community centers, etc., may obtain the use of them for educational and recreational purposes. This section now has a total of forty-two distributing centers, eleven of which were established during the past fiscal year. The Visual Instruction Section is, therefore, principally engaged in the salvaging of educational and war film, and in systematically distributing it throughout the country for as wide a use through educational and public organizations as can be secured.'

" The Bureau of Mines, which has its main office in Pittsburgh, and branches in some 16 cities,

has motion pictures on about 55 subjects. They are principally films on safety activities, mining methods, and welfare work among miners and their families. According to my information, the Bureau of Mines has from 5 to 10 prints of each of its subjects, and the negatives would be available, under certain restrictions, for the making of prints to be used in public educational work. Further information may be obtained by writing to the Educational Director of the Bureau.

"The National Parks Service has ten subjects portraying scenery in the larger reservations under the administration of the service. Prints of these subjects are circulated direct from the Washington office. Information as to whether the negatives may be obtained for the manufacture of educational prints may be obtained from the Washington office.

"The Marine Corps has a number of motion pictures designed primarily for recruiting purposes. Among them are 'Flying with the Marines,' 'Soldiers of the Sea,' and 'Devil Dogs in the Making.' Information may be obtained from the Commandant of the Marine Corps, Washington, D. C.

"The Bureau of Navigation of the Navy Department has produced two kinds of motion pictures—technical, dealing mainly with tests of aircraft; and popular, showing general naval activities and meant particularly for recruiting pur-

poses. Films that are said to be especially suitable for educational use are 'A Navy of Two Seas,' which contains aerial views of the Panama Canal; and a picture showing the flight of three hydroplanes from San Diego to San Francisco. Information on these films, as well as on a large number of aerial 'stills' depicting the harbors of the United States, and which might be unusually useful in the teaching of geography, should be requested from the Bureau of Navigation, Navy Department, Washington, D. C.

"The Army Medical Museum produced during the war about 150 medical subjects, covering principally surgery, sanitation, treatment of war wounds, rehabilitation of crippled soldiers, bone grafting, house flies, mosquitoes, cooties, lectures on orthopedic surgery, and prevention and treatment of various diseases. These subjects were used extensively during the war in teaching health essentials to soldiers, and doubtless some of them would be valuable in health work among civilians. Most of the subjects are said to be more suitable for medical schools and colleges, although there are some subjects of a more popular nature. The Museum, I am told, has from two to ten of each of its 150 subjects. Use of prints may be obtained direct by communicating with the Commanding Officer, Instruction Laboratory, Army Medical Museum, Washington, D. C.

"The Public Health Service has not produced

motion pictures, but it has indorsed the production of several made by commercial companies, and also 'Fit to Win,' which was produced by the Army. It has turned over its prints to the Bureau of Education.

"The Children's Bureau of the Labor Department has 15 copies of 'Our Children,' a two-reel child-welfare picture that was produced by a commercial company. Use of prints may be obtained direct by writing to the assistant director of the bureau.

"The Bureau of Standards is engaged in experimental work with film stock from which valuable results may be expected.

"During the war the Committee on Public Information was active in motion-picture work. It has turned over its films to the Bureau of Education. The Liberty Loan Organization of the Treasury also produced, or had produced some films designed for the emergencies of the period.

"The Department of Agriculture has produced 112 subjects of one reel or more, and is constantly adding to that number. Thirty have been added in the last three months, and more than fifteen should be added within the next three months. The Department has a half-million feet of positive film, all of it in circulation, most of it constantly. All of our subjects are for general instruction. The Department is inclined to 'go the limit' so far as its resources and its regu-

lations permit, in making its pictures available for your use or any other legitimate use.

" Any university, school or other creditable organization in the country may quickly obtain permission to purchase copies of Department of Agriculture film. Arrangements have been completed by which the cost is reduced to the manufacturing charge of about $40 for the usual reel of 1,000 feet on standard inflammable stock; on standard, slow-burning stock a reel costs about $53, and on narrow width, slow-burning stock, about $60.

" Under this arrangement, which was perfected after competitive bidding, the Department named as bonded agent a commercial printing company in New York. The negatives produced by the Department are intrusted to this company because the Department's laboratory is not equipped for the production of large numbers of positive prints. Persons or organizations wishing to purchase copies of films should make application to the Department of Agriculture. When authorization is given for the purchase, the company is notified. It is required, when such authorization is given, that the purchaser promise that no alterations will be made in the subject-matter of the film, and that its identity as a Department of Agriculture production will be maintained.

" The Department's own distribution system. under which there is no charge to borrowers

except for transportation, also is open to you so far as allowed by the limited supply of prints —we now have 460 prints in all. The primary purpose of this distribution system is to meet the needs of the Department's extension and field workers for whose use the pictures have been primarily made. This, of course, includes the workers of the State Agricultural Colleges and other coöperating institutions. But, when available, prints will be lent for limited periods—as long as seems practicable, however—to educational institutions, or preferably to circuits of schools. Extremely interesting programs of six reels or more could be worked up for such circuits from the offerings of the Department of Agriculture and the other government agencies that have available films.

"It has been claimed that the Department of Agriculture touches more people in more places every day than any other department of the Federal Government. It is composed of seventeen important bureaus and divisions, every one of which has something vital to do with the welfare of this country. The Department has its own particular field of activity—the farms that feed this country and a large part of the rest of the world—but it is just as important to the city dweller as it is to the farmer. Such important activities as safeguarding the country's meat supply from disease, forecasting the weather, build-

ing good roads, protecting the National Forests, administering the Federal Food and Drugs Act, are part of the Department's daily work. Every one of these tasks is of import to every man, woman and child in this country, and in addition is the supreme task of encouraging and maintaining food production so that there will be enough for everybody to eat. Thus the Department's motion pictures—which make common property of the knowledge developed by its investigations and acquaint the public with the methods and significance of important lines of work—have a significance in education that is difficult to estimate."

CHAPTER V

DISTRIBUTION: LIST OF EXCHANGES

MANY and devious are the routes of most motion pictures from the hands of the original producers to the ultimate consumers—the exhibitors. A consideration of the more common distributing systems should prove helpful to the non-theatre user. He should be familiar with the standard exchange system; the leading non-theatrical systems; the narrow-tread group; the large group of small distributors known as "States Rights" men, and finally the "Junkers"—the small speculators, who will buy anything, sell anything, rent anything in the line of films. A list of the leading distributors is appended at the end of this chapter.

The chief method of distributing film is through exchanges. The exchange is nothing more than a rental office, or library. It carries a stock of prints which it will rent at so much per showing. Most exchanges are owned by, or affiliated with, one of the several large national chains of exchanges. Some of the largest producers have their own exchanges, in each of the 27 odd film centers of the country. Exchanges are interested almost

wholly in serving the theatrical exhibitor; but they are usually very glad to accept what business comes from the school and church. They rarely make any special effort to get such business, or to serve those exhibitors efficiently. The non-theatrical field is a closed book to the average exchange man.

Despite the indifference of these distributors, the non-theatre exhibitor is forced to depend upon them for his main supply. He will find little difficulty, however, in dealing with the exchanges provided he knows what subjects he wants, and is businesslike in his dealings.

Two general methods of rental—or "booking"—prevail, viz., "open booking" and longer contracts. The former permits the exhibitor to pick and choose any picture or pictures he may desire, with perfect freedom of choice; while under the contract system he must subscribe for a whole series of pictures. He cannot take one; he must take all or none. The series may number anywhere from three to 52 subjects. The pictures are "released"—placed on the market—at biweekly, weekly or longer intervals, to fit into a program of regular showings. The contract system is not common, except on the "first runs" of prominent stars. Ordinarily the school or church is free to make selections, regardless of any booking system.

Such institutions will often find it advisable to

book news weeklies, educationals, and similar short subjects on a serial or contract basis. The subject-matter of such reels does not often need pre-viewing or censoring before being presented. By booking a series much time and some expense can be saved. The exchange will usually sell a series of showings at lower prices than for a single one. Features, and comedies, should be booked individually, and only after the exhibitor has viewed them. Exchanges will gladly run off pictures for this purpose in rooms specially equipped.

In the theatrical distributing field, States Rights dealers play a considerable part. They differ from the regular exchange chiefly in size; being smaller. They buy the rights to exhibit pictures in a given State, and they control the exclusive privilege of all showings in that State. Their pictures are often of the "Super Feature" type, and are specially exploited.

"Junkers" deal in what is known in the film industry as "junk"—but this does not always mean that the film in question is actually worthless. It is "used up" for theatrical purposes, but is often priceless for non-theatre usage. The physical condition of the print may be excellent, but it is classed as junk when it has been shown in all of the theatres, or when the theatres have consistently refused to book it because—perhaps—it was too "high brow." The junker buys it

for a song, and rents it to the small theatre, or elsewhere. The school or church will often find invaluable scenic, missionary, or similar material in the hands of the junker. He usually can be found doing business through one of the smaller exchanges. Naturally such material can be rented at a very low price. It pays to browse around among exchanges just as you would among book stores.

While theatrical distribution is of necessity, the main source of films, there are other distributors who specialize wholly in non-theatrical service. The largest of such organizations is the Community Motion Picture Service.

"Selective service" is the idea in back of the Company. Lists of films, from which the subscriber can pick and choose, as in the case of the theatre exchange, are not provided. The exhibitor merely indicates the type of program desired, and the purpose to be accomplished. After a careful analysis of the problem, the Service sends films suitable to the occasion.

The Company takes full responsibility for the quality and suitability of the program. It views every picture released. Upon the basis of these reviews, it analyzes and classifies the picture for its suitability in various fields. The program which the subscriber receives is assembled from many sources. Some reels are rented from the exchanges; others the Company owns. Wherever

the required film may be, they find it, and embody it in the program at hand.

Another important distributing institution is the United States Government. Chapter 4, Part I, is devoted to government films.

Industrial distributors are playing an important part in the educational film field. Many a large factory has valuable film material which it will gladly supply free of charge in return for the publicity obtained through having the film shown. Unfortunately these distributors have no common system of distribution. They do not exploit their films sufficiently, and they have almost no access to the exhibitor. Nevertheless, a careful search in this field will yield a large amount of material ideally suited to educational needs.

The Bureau of Commercial Economics, Washington, D. C., is the largest distributor of industrial reels. It is not a government bureau—despite the suggestion in the name. To quote from the literature of the Bureau: "The Bureau of Commercial Economics is an altruistic association using the facilities and instrumentalities of governments, manufacturers and educational institutions in the disseminating of useful information by the graphic method of motion pictures displayed invariably to audiences admitted free.

"The Bureau displays its reels in universities, colleges, technical and agricultural schools, public

libraries, State armories, high schools, community institutes, public institutions, State Granges, settlement houses, missions, chambers of commerce, boards of trade, commercial clubs, rotary clubs, etc., etc. . . . also, with powerful projectors, operated from auto trucks, in parks, playgrounds, rural communities and other centers for the general public."

The Bureau lists 665 subjects covering almost every aspect of industrial and governmental activity in the United States and other countries.

In addition to the concerns mentioned above, there are numerous small companies and individuals who handle "special shows," which consist often of a five to seven reel feature, specially suited to non-theatre use. They supply everything for the performance—the machine, booth, operator, cables, films, and even tickets and advertising matter.

The narrow-tread film companies, such as Pathescope and Victor, offer service on a rental basis; either in series, or individual reels. They handle only slow-burning film, printed on stock 1⅛ inches wide. (Standard width is 1⅜ inches.) The advantages of such libraries lie in the fact that the films are safe to use without fireproof booth; the service is inexpensive, and the films are chosen for non-theatre use. The number of subjects is necessarily limited.

The following list of distributing organizations

was corrected to date of publication of this volume; but, owing to the rapid changes constantly occurring in the film industry, the list will soon be out of date. Nevertheless, we believe that most of the central organizations or exchanges listed are likely to remain in existence for years to come, and the changes that occur will be chiefly in the addresses of the branch offices.

GOVERNMENT FILMS

Qualified State Distributing Centers for the Visual Instruction Section, Bureau of Education, Department of the Interior.

University of Alabama. University, Alabama.
University Extension Division, University of Arizona. Tucson, Arizona.
Extension Division, University of Arkansas. Fayetteville, Arkansas.
University Extension Division, University of California. Berkeley, California.
Visual Instruction Section, University of Colorado. Boulder, Colorado.
Extension Service, University of Florida. Gainesville, Florida.
University Extension Division, University of Georgia. Athens, Georgia.
Illinois State Normal University. Normal, Illinois.
University Extension Division, Indiana University. Bloomington, Indiana.
Extension Division, University of Iowa. Iowa City, Iowa.
Department of Visual Instruction, Iowa State College. Ames, Iowa.
Extension Division, University of Kansas. Lawrence, Kansas.
University of Kentucky. Lexington, Kentucky.
Extension Service, State Normal School. Natchitoches, Louisiana.
Extension Division, State Department of Public Instruction. Boston, Massachusetts.
Extension Service, Maryland State College of Agriculture. College Park, Maryland.
University Extension Division, University of Michigan. Ann Arbor, Michigan.
University Extension Division, University of Minnesota. Minneapolis, Minnesota.
Visual Instruction Section, Mississippi Agricultural and Mechanical College. Agricultural College, Mississippi.
University Extension Division, University of Missouri. Columbia, Missouri.
Extension Division, State University. Missoula, Montana.
University of Nebraska. Lincoln, Nebraska.

Rutgers College. New Brunswick, New Jersey.
Visual Instruction Section, Buffalo Society of Natural Science. Buffalo, New York.
University Extension Division, University of Nevada. Reno, Nevada.
Bureau of Community Service, Raleigh, North Carolina.
Extension Division, University of North Dakota. University, North Dakota.
University Extension Division, University of Oklahoma. Norman, Oklahoma.
University Extension Division, University of Oregon. Eugene, Oregon.
The Commercial Museum. Philadelphia, Penn.
The Educational Museum, Cleveland Normal Training School. Cleveland, Ohio.
Visual Instruction Section, University of Pittsburgh. Pittsburgh, Penn.
Extension Service, Brown University. Providence, Rhode Island.
Extension Service, University of South Carolina. Columbia, South Carolina.
Extension Service, University of South Dakota. Vermillion, South Dakota.
University Extension Division, University of Tennessee. Knoxville, Tennessee.
Visual Instruction Section, University of Texas. Austin, Texas.
University Extension Division, University of Utah. Salt Lake City, Utah.
University Extension Division, University of Virginia. Charlottesville, Virginia.
University of Vermont. Burlington, Vermont.
State College of Washington. Pullman, Washington.
Visual Instruction Section, University of Wisconsin. Madison, Wisconsin.
University Extension Division, West Virginia University. Morgantown, West Virginia.

FREE INDUSTRIAL FILMS

Bureau of Commercial Economics. Washington, D. C.
Industrial Department, Y. M. C. A. 347 Madison Avenue, N. Y. C.

NON-THEATRICAL DISTRIBUTORS

New York City, Church Motion Picture Corporation, 11 Broad-

New York City, Argonaut Distributing Corporation, 71 West 23rd St.
New York City, Beseler Film Co., 71 West 23rd St.
New York City, Carter Cinema Co., 220 West 42nd St.
New York City, Community Motion Picture Service, 46 West 24th St. (Branch offices in many cities.)
New York City, Educational Films Corporation, 729 Seventh Ave.
New York City, International Church Film Corporation, 71 West 23rd St. (Branches in many cities.)
New York City, Kineto Review, 71 West 23rd St.
New York City, Worcester Film Corporation, 145 West 45th St.
New York City, Cosmoramic Pictures Corporation, 33 West 42nd St.
New York City, National Non-Theatrical Motion Pictures, Inc., 232 West 38th St.
New York City, Edited Pictures System, Inc., 71 West 23rd St.
Chicago, Ill., Atlas Educational Film Company, 63 East Adams St.
Chicago, Ill., Fitzpatrick & McElroy, 202 South State St.
Chicago, Ill., New Era Films, 207 South Wabash Ave.
Boston, Mass., Church Film Corporation, 64 Broadway.
Toronto, Canada, Picture Service Limited, 755 Yonge St.

AMERICAN RED CROSS FILMS

Atlanta, Georgia, 249 Ivy St.
Boston, Mass., 1108 Massachusetts Ave.
Chicago, Ill., Pioneer Bldg.
Cleveland, Ohio, Plymouth Bldg.
Denver, Colo., 14th and Welton Sts.
Minneapolis, Minn., 423 Fifth St., S.
New Orleans, La., Washington Artillery Hall.
New York City, 220 West 42nd St.
Philadelphia, Penn., 134 S. 16th St.
San Francisco, Cal., 864 Mission St.
Seattle, Wash., White Bldg.
St. Louis, Mo., Equitable Bldg.
Washington, D. C., 411 18th St., N. W.

FAMOUS PLAYERS-LASKY CORP.

Boston, H. J. Krause, 8 Shawmut St.
Portland, Wm. O'Brien, 85 Market St.
New Haven, Frank J. Scully, 132 Meadow St.; Harry Asher, District Manager.
New York City, H. H. Buxbaum, 729 7th Ave.

Buffalo, Allan S. Moritz, 145 Franklin St.
Albany, Jos. H. Seidelman, 33 Orange St.
Philadelphia, J. D. Clark, 1219 Vine St.
Washington, Lester Rosenthal, 421 10th St., N. W.; W. E. Smith, District Manager.
Pittsburgh, E. M. Stuve, 1018 Forbes St.
Cincinnati, Fred. Strief, Pioneer and Broadway.
Cleveland, Herbert E. Elder, 811 Prospect Ave.
Detroit, C. W. Perry, 63 Elizabeth St.; H. P. Wolfberg, Spec. Rep.
Chicago, R. E. Bradford, 845 So. Wabash Ave.
Minneapolis, J. W. Hicks, Jr., 608 1st Ave., N.; Fred. Creswell, Spec. Rep.
Kansas City, Joseph H. Gilday, 2024 Broadway.
St. Louis, G. E. Akers, 3929 Olive St.
Des Moines, R. C. Li Beau, 415 W. 8th St.
Omaha, Paul J. Swift, 208 S. 13th St.; M. H. Lewis, Spec. Rep.
Atlanta, J. E. Simpson, Jr., 51 Luckie St.
New Orleans, H. F. Wilkes, 814 Perdido St.
Dallas, J. P. Corbin, 1902 Commerce St.
Oklahoma City, Leslie Wilkes, 128 W. 3rd St.
Charlotte, David Prince, 28 W. 4th St.; W. J. Pratt, Spec. Rep., New Orleans and Charlotte; L. L. Dent, Spec. Rep., Dallas and Oklahoma City.
Salt Lake City, F. B. McCracken, 133 E. 2d So. St.
Denver, M. H. Cohn, 1747 Welton St.; Louis Marcus, District Manager.
San Francisco, H. G. Rosebaum, 821 Market St.
Los Angeles, H. B. Gallance, 112 W. 9th St.
Seattle, G. P. Endert, 2017 3rd Ave.
Portland, 14 N. 9th St.; Atlanta, New Orleans, Dallas, Oklahoma City and Charlotte exchanges under name of Southern Enterprises, Inc. (S. A. Lynch.)

All Canadian Offices are Famous-Lasky Film Service, Ltd.

Toronto, 206 Victoria St., G. Knox Haddow.
Montreal, 6 McGill College Ave., E. English.
St. John, 8 Mill St., White Bldg., E. Rosecan.
Winnipeg, 221 McDermott Ave., Aikins Bldg., R. H. Ramsey.
Calgary, 310 8th Ave., Princess Theater Bldg., M. A. Milligen.
Vancouver, 61 Central Bldg., 553 Granville St., Wm. Hanscher.
Home Office, Toronto, 308 Victoria St., Geo. W. Weeks, Mgr.; W. A. Bach, Asst.

ASSOCIATED FIRST NATIONAL PICTURES, INC.

Denver, J. H. Ashby, 1732 Welton St.
St. Louis, S. J. Baker, 617 North Grand Ave.

St. John, Can., M. Bernstein, Regal Films, Ltd., 167 Prince William St.
Atlanta, C. R. Beacham, 146 Marietta St.
Los Angeles, D. Bershon, 634 H. W. Hellman Bldg.
Oklahoma City, J. A. Brainard, 127 So. Hudson St.
New Orleans, C. J. Briant, 1401 Tulane Ave.
Ottawa, Can., Henry Brouse, Imperial Theater Bldg.
Indianapolis, Floyd Brown, 24 W. Washington St.
Minneapolis, J. F. Cubberley, 409 Loeb Arcade Bldg.
Washington, D. C., Boyd Cunningham, 916 G St., N. W.
Vancouver, B. C., W. P. Dewees, 1318 Standard Bank Bldg.
San Francisco, S. Y. Edwards, 146 Golden Gate Ave.
New Jersey, A. M. Fabian, 729 7th Ave., New York.
Montreal, Can., A. J. Ferte, Regal Films, Ltd., 31 McGill College Ave.
Seattle, F. V. Fisher, 2023 Third Ave.
Milwaukee, H. J. Fitzgerald, 402 Toy Bldg.
Louisville, Lee L. Goldberg, National Theatre Bldg.
Cincinnati, R. H. Haines, Broadway Film Bldg.
Salt Lake City, L. L. Hall, 60 Exchange Place.
Philadelphia, W. J. Heenan, 1339 Vine St.
New Haven, M. H. Kelcher, 126 Meadow St.
Omaha, C. E. Solah, 314 So. 13th St.
New York City, Joseph Klein, 729 7th Ave.
Cleveland, W. E. Lusk, 3648 Euclid Ave.
Kansas City, E. C. Rhoden, 317 Floyd Bldg.
Toronto, Can., W. J. Reid, Regal Films, Ltd., 21 Adelaide St.
Boston, Thomas B. Spry, 7-9 Isabella St.
Detroit, Harry Scott, 63 East Elizabeth St.
Chicago, R. C. Seery, 110 So. State St.
Richmond, Carl Senning, 901 E. Broad St.
Pittsburgh, Joseph Skirboll, 414 Ferry St.
Buffalo, S. W. Smith, 215 Franklin St.
Des Moines, S. S. Schwarz, 326 Iowa Bldg.

METRO PICTURES CORPORATION

Atlanta, C. E. Kessnich, 146 Marietta St.
Buffalo, H. W. Kahn, 259-261 Franklin St.
Boston, E. A. Golden, 60 Church St.
Chicago, J. S. Graumen, 5 So. Wabash Ave.
Cincinnati, W. W. Rowland, 7th and Main Sts.
Cleveland, C. E. Almy, 410 Standard Thea. Bldg.
Dallas, L. Bickel, 1924 Main St.
Detroit, C. H. Townsend, 51 Elizabeth St., E.
Denver, F. P. Brown, 1721 California St.
Kansas City, S. L. Haldeman, 17th and Main Sts.

Los Angeles, B. F. Rosenberg, 820 S. Olive St.
Minneapolis, A. H. Fischer, 818 Prod. Exchange.
New York City, T. J. Conners, 729 7th Ave.
New Orleans, C. J. Briant, 1401 Tulane Ave.
Omaha, S. MacIntyre, 211 So. 13th St.
Pittsburgh, J. E. Davis, 1018 Forbes St.
Philadelphia, R. Lynch, 1321 Vine St.
Seattle, Carl Stearn, 2002 Third Ave.
San Francisco, F. W. Voigt, 55 Jones St.
Salt Lake City, G. L. Cloward, 20 Post Office Pl.
St. Louis, Chas. Werner, 3313a Olive St.
Washington, D. C., G. W. Fuller, 916 G St., N. W.
Toronto, Can., N. N. Nathanson, 21 Adelaide St., W.

REALART PICTURES CORPORATION

Atlanta, Joseph L. Marentette, 146 Marietta St.
Boston, Walter R. Scates, 5 Isabella St.
Buffalo, Harry E. Lotz, 221 Franklin St.
Chicago, Harry W. Willard, 207 So. Wabash Ave.
Cincinnati, Mark Goldman, Film Exchange Bldg., Pioneer and Broadway.
Cleveland, James B. Reilly, Room 200, Bangor Bldg., 942 Prospect Ave., E.
Dallas, Diaz Callahan, 1909 Commerce St.
Denver, Bert R. Latz, 1742 Glenarm St.
Detroit, Ralph B. Quive, 303 Joseph Mack Bldg.
Kansas City, John N. MacMeekin, Film Exch. Bldg., 17th and Main Sts.
Los Angeles, Oren F. Woody, 922 So. Olive St.
Minneapolis, Harry L. Hollander, Room 801, Produce Exchange Bldg.
New Orleans, Truly B. Wildman, Saenger Bldg., Tulane and Liberty Sts.
New York City, Lester W. Adler, 130 W. 46th St.
Omaha, C. G. Kingsley, 1216 Farnam St.
Philadelphia, 253 N. 13th St.
Pittsburgh, Henry E. Wilkinson, 1018 Forbes St.
St. Louis, Floyd H. Lewis, 3626 Olive St.
Seattle, Albert W. Eden, 2012 Third Ave.
San Francisco, Ben F. Simpson, 985 Market St.
Washington, D. C., Louis Reichert, 806-820 Mather Bldg., 916 G St., N. W.

HALLMARK PICTURES CORPORATION

Boston, R. A. Bertschy, 48 Melrose St.
Buffalo, F. D. Lawlor, 257 Franklin St.
Chicago, D. M. Vandawalker, 5 So. Wabash Ave.
Cincinnati, J. M. Johnston, 215 E. 5th St.
Cleveland, R. W. Myerson, 2163 E. 9th St.
Denver, L. T. Fidler, 1425 Champa St.
Detroit, G. W. Thompson, 55 E. Elizabeth St.
Kansas City, J. E. Foland, Ozark Bldg.
Los Angeles, R. H. Allan, 643 S. Olive St.
Milwaukee, F. C. Hensler, 506 Toy Bldg.
Minneapolis, A. L. Zacherl, 16 N. 4th St.
New Haven, M. H. Rabanus, 130 Meadow St.
New York City, P. E. Meyer, 1457 Broadway.
Philadelphia, R. A. Daniels, S. E. cor. 13th and Vine Sts.
Pittsburgh, C. C. McKibbin, 414 Penn Ave.
San Francisco, S. S. Edwards, Jr., 86 Golden Gate Ave.
Seattle, C. C. Thompson, 2010 3rd Ave.
Salt Lake City, A. J. Van Gorder, 50 Exch. Pl.
St. Louis, H. E. Boswell, 3318 Lindell Blvd.
Washington, D. C., W. A. Busch, 916 G St., N. W.; Atlanta, Dallas, New Orleans, George N. Montgomery, General Sales Manager.

FOX FILM CORPORATION

District Managers

Atlanta, George Allison, 111 Walton St.
Boston, H. F. Campbell, 54 Piedmont St.
Buffalo, M. H. Greenwald, 209 Franklin St.
Chicago, C. W. Eckhardt, 845 So. Wabash Ave.
Cincinnati, Rudolph Knoepfle, 514 Elm St.
Cleveland, William Shapiro, 750 Prospect Ave.
Dallas, I. E. Harrington, 1907 Commerce St.
Denver, Joseph Kaliski, 1422 Welton St.
Indianapolis, C. E. Penrod, 232 N. Illinois St.
Kansas City, E. H. Wachter, 928 Main St.
Los Angeles, B. E. Loper, 734 S. Olive St.
Minneapolis, M. J. Weinfeldt, 608 First Ave. N.
New Orleans, B. L. Dudenhefer, 725 Poydras St.
New York, Louis Rosenbluh, 130 W. 46th St.
Omaha, Sidney Meyer, 1413-15 Harnery St.
Philadelphia, George Dembow, 1315 Vine St.

Pittsburgh, L. Burnstein, 121 Fourth Ave.
San Francisco, F. H. Butler, 243 Golden Gate Ave.
Seattle, Lester Sturm, 2006 Third Ave.
St. Louis, George E. McKean, 2632 Olive St.
Salt Lake City, Clyde A. Walker, 46 Exchange Pl.
Washington, Paul E. Krieger, 305 Ninth St., N. W.

Canada

Montreal, Maurice West, 322 St. Catherine St., W.
Toronto, I. M. Devaney, 21 Dundas St., E.
St. John, H. Nelson Hooper, 162 Union St.
Calgary, Jos. Lieberman, Princess Theater Bldg.
Winnipeg, William S. Jones, 48 Aikins Bldg.
Vancouver, R. A. Scott, Leigh-Spencer Bldg.

SELECT PICTURES CORPORATION

Albany, Chas. Walder, 679 Broadway.
Atlanta, W. R. Liebman, Hirsh Bldg., 148 Marietta St.
Boston, Benj. P. Rogers, 78 Broadway.
Buffalo, A. W. Moses, 176 Franklin St.
Chicago, B. W. Beadel, 207 S. Wabash Ave.
Cincinnati, J. A. Conant, Pioneer St. and Broadway.
Cleveland, G. A. Erdman, 750 Prospect Ave.
Dallas, C. C. Ezell, 1913½ Commerce St.
Denver, B. S. Cohen, 1728 Welton St.
Detroit, J. O. Kent, 63 E. Elizabeth St.
Indianapolis, Samuel Sax, 66 W. New York St.
Kansas City, G. C. Reid, 17th and Main Sts.
Los Angeles, H. C. Cohen, 818 So. Olive St.
Minneapolis, E. C. Feilder, Produce Exch. Bldg.
New Haven, Morris Safier, 19 Portsea St.
New Orleans, J. F. Flarity, 1006 Gravier St.
New York, Henry Siegel, District Manager, 126 W. 46th St.
Omaha, C. W. Taylor, 1411 Harney St.
Philadelphia, M. Milder, 1308 Vine St.
Pittsburgh, Leo F. Levison, 1201 Liberty Ave.
St. Louis, W. G. Carter, 3617 Washington Ave.
Salt Lake City, T. C. Malcolm, 160 Regent St.
San Francisco, Harry Goldberg, 104 Golden Gate Ave.
Seattle, Hugh Rennie, 2024 Third Ave.
Washington, Wm. A. V. Mack, 525 13th St., N. W.
V. P. Whitaker, West Coast Representative, Los Angeles.
C. G. Ezell, Southern Division Manager, Dallas.

Select (Canadian Corporation)

13-15 Adelaide St., W., Toronto, Ont.

Phil Kauffman, Managing Director.
*Calgary, R. E. Kissock, Elma Block.
Montreal, Earl W. Kramer, Orpheum Theatre Bldg., 289 St. Catharine St., W.
St. John, W. C. McNorgan, 167 Prince William St.
Toronto, W. A. Kent, 13-15 Adelaide St., W.
*Vancouver, T. W. Bailey, 42 Leigh-Spencer Bldg.
Winnipeg, Dan Freeman, Spec. Canadian Representative, Phoenix Block.
*Under supervision of Mr. Dan Freeman, Winnipeg.

Select (French Corporation)

Jean Rosen, 43 Rue La Bruyere, Paris Exchange 8, Avenue de Clichy. Branches will be established at The Hague, Holland; Brussels, Belgium; Lille, Paris, Strasbourg, Als.; Bordeaux, Lyon and Marseilles, France; Madrid and Barcelona, Spain; Milan, Venice and Rome, Italy, and Geneva, Switzerland.

Select (Australian Corporation)

Temporary office, Record Chambers, 77 Castlereagh St.
D. J. Selznick, Managing Director; John Corbett Jones, Genera. Manager.

ROBERTSON-COLE COMPANY

Albany, J. M. Flynn, 733 Broadway.
Atlanta, R. A. Davis, 146 Marietta St.
Boston, M. E. Morey, 39 Church St.
Buffalo, E. W. Crane, 215 Franklin St.
Chicago, Max Levy, Consumers' Bldg.
Cincinnati, Chas. Casanave, Broadway Film Bldg.
Cleveland, A. C. Lebensburger, 750 Prospect Ave.
Dallas, P. K. Johnston, 1807 Main St.
Denver, J. S. Nelson, 1724 Welton St.
Detroit, R. J. Churchill, Elizabeth and John R. Sts.
Indianapolis, C. W. Tyler, 111 W. Maryland St.
Kansas City, R. E. Churchill, Ozark Bldg., 928 Main St.
Los Angeles, A. R. Patten, 825 S. Olive St.
Milwaukee, Louis Klar, 301 Enterprise Bldg.
Minneapolis, I. F. Mantzke, 309 Loeb Arcade Bldg.
New Orleans, J. B. Dumestre, Jr., 816 Pordido St.

New York, J. Safron, 1600 Broadway.
Oklahoma City, A. H. McLoughlin, 7 S. Walker St.
Omaha, C. L. Peavey, 1306 Farnum St.
Philadelphia, J. F. Gill, 1219 Vine St.
Pittsburgh, Geo. Moore, 121 Fourth Ave.
San Francisco, W. A. Crank, 177 Golden Gate Ave.
St. Louis, Joe Desberger, 3623 Washington Ave.
Seattle, L. Wingham, 19933 Third Ave.
Washington, M. A. Levy, 916 G St., N. W.

UNITED ARTISTS PICTURES CORPORATION

Atlanta, M. C. Coyne, 146 Marietta St.
Boston, W. H. Jenner, 41 Winchester Ave.
Chicago, C. E. Smith, 17 N. Wabash Ave.
Cleveland, R. K. Evans, 2143 Prospect Ave.
Dallas, J. E. Luckett, 1930 Main St.
Denver, T. Y. Henry, 617 19th St.
Detroit, B. A. Lucas, 605 Joseph Mack Bldg.
Kansas City, H. D. Buckley, 17th and Main Sts.
Los Angeles, W. S. Rand, 643 S. Olive St.
Minneapolis, J. F. Brett, 402 Film Exch. Bldg.
New York, J. Von Tilzer, 729 7th Ave.
Philadelphia, C. S. Trowbridge, 1319 Vine St.
Pittsburgh, C. E. Moore, 414 Ferry St.
San Francisco, E. B. Baron, 100 Golden Gate Ave.
Seattle, C. W. Harden, 1913 Third Ave.
Washington, G. W. Lenehan, 801 Mather Bldg.
Toronto, A. C. Berman, 123 Bay St.

UNIVERSAL FILM CO.

Atlanta, Wm. Oldknow, Consolidated F. & S. Co., 111 Walton St.
Baltimore, P. Oletsky, Baltimore F. Ex., 412 E. Baltimore St.
Boston, E. A. Golden, American F. F. Co., 60 Church St.
Buffalo, M. A. Chase, Universal F. Ex., 35 Church St.
Butte, Herman Lerch, Universal F. Ex., 23 So. Montana St.
Charlotte, E. F. Dardine, Universal F. Ex., 307 W. Trade St.
Chicago, I. L. Lesserman, Universal F. Ex., 220 So. State St.
Cincinnati, Cleve Adams, Universal F. Ex., Film Exch. Bldg., Pioneer and Broadway.
Cleveland, E. J. Smith, Universal F. Ex., Prospect Ave. and Huron.
Dallas, N. E. Depinet, Consolidated F. & S. Co., 1900 Commerce St.
Denver, Eugene Gerbase, Universal F. Ex., 1422 Welton St.

Des Moines, Edgar B. Haines, Universal F. Ex., 918 Locust St.
Detroit, W. D. Ward, Universal F. Ex., 63 E. Elizabeth St.
El Paso, R. C. McIlheran, Consolidated F. & S. Co., 110 E. Franklin St.
Indianapolis, Ralph W. Abbett, Universal F. Ex., 113 W. Georgia St.
Jacksonville, John R. Barton, Consolidated F. & S. Co., 615½ W. Forsythe St.
Kansas City, J. H. Calvert, Universal F. Ex., Film Exch. Bldg., Main and 17th Sts.
Los Angeles, C. L. Theuerkauf, Universal F. Ex., 822 S. Olive St.
Memphis, W. E. Sipe, Consolidated F. & S. Co., 226 Union Ave.
Milwaukee, Geo. Levine, Universal F. Ex., 174 2nd St.
Minneapolis, J. D. Roderick, Universal F. Ex., 719 Hennepin Ave.
New Haven, Morris Joseph, Big U Film Ex., 126 Meadow St.
New Orleans, W. M. Richards, Consolidated F. & S. Co., 914 Gravier St.
New York, Chas. Rosenzweig, Geo. Uffner, Big U Film Ex., 1600 Broadway, 7th Floor.
Oklahoma City, Sam Benjamin, Universal F. Ex., 116 W. 2nd St.
Omaha, H. F. Lefholtz, Universal F. Ex., 1304 Farnum St.
Philadelphia, V. R. Carrick, Fairmount F. F. Ex., 1304 Vine St.
Pittsburgh, Herman Stern, Universal F. Ex., 1018 Forbes St.
Portland, C. W. Koerner, Universal F. Ex., 405 Davis St.
St. Louis, Barney Rosenthal, Universal F. Ex., 2116 Locust St.
Salt Lake City, G. A. Hager, Universal F. Ex., 56 Exchange Pl.
San Francisco, C. A. Nathan, Universal F. Ex., 121 Golden Gate Ave.
Seattle, V. M. Schubach, Universal F. Ex., 215 Virginia St.
Spokane, Wallace Potter, Universal F. Ex., 10 So. Banard St.
Sioux Falls, S. W. Fitch, Universal F. Ex., Colonial Theater Bldg.
Toronto, Can., Clair Hague, Canadian Universal Film Co., 106 Richmond St., W.
Washington, D. C., H. C. Wales, Washington F. Ex., 307 Ninth St., N. W.
Calgary, Can., D. G. Walkley, Can. Univ. F. Co., 407 W. 8th Ave.
Montreal, Can., D. Leduc, Can. Univ. F. Co., 295 St. Catharine St., W.
St. John, Can., G. W. Margetts, Can. Univ. F. Co., 87 Union St.
Vancouver, B. C., W. Walkley, Can. Univ. F. Co., 553 Granville St.
Winnipeg, Man., J. A. Wilson, Can. Univ. F. Co., 40 Aikens Bldg.
Charleston, F. W. Barlett, Univ. Film Ex., 707 Dryden St.

Columbus, M. H. Melchior, Univ. Film Ex., 294½ N. High St.
Ft. Smith, T. W. Sharp, Univ. Film Ex., 709 Rogers Ave.
Wilkes-Barre, W. H. Devonshire, Exhib. Film Ex., 61 S. Penn Ave.
Wichita, H. H. Buntley, Univ. Film Ex., 209 E. 1st St.

EDUCATIONAL FILMS CORPORATION

Atlanta, Ga., Educational Film Exchange of Georgia, 73 Walton St.
Boston, Mass., N. Y. Exchange for Educational Films, 10 Piedmont St.
Buffalo, N. Y., N. Y. Exchange for Educational Films, 327 Main St.
Chicago, Ill., Educational Film Exchange of Illinois, Inc., 220 S. State St.
Cincinnati, Ohio, Ohio Exchange for Educational Films Co., Inc., 7th and Main Sts.
Cleveland, Ohio, Ohio Exchange for Educational Films Co., Inc., 501 Standard Theater Bldg.
Dallas, Texas, address not determined.
Denver, Colo., address not determined.
Des Moines, Ia., Educational Film Exchanges of Iowa, 100 Locust St.
Detroit, Mich., Educational Film Exchanges of Michigan, 63 E. Elizabeth St.
Indianapolis, Ind., Educational Film Exchange, Inc., of Indiana, 9 West Market St.
Kansas City, Mo., Educational Film Exchanges of Iowa, 5th Floor, Film Ex. Bldg.
Los Angeles, Calif., Educational Film Corporation of So. Calif., 732 S. Olive St.
Louisville, Ky., Educational Film Exchange of Ky.-Tenn., National Th. Bldg.
Minneapolis, Minn., Educational Film Exchange of Minn., Inc., 407 Loeb Arcade.
New Haven, Conn., N. Y. Exchange for Educational Films, Inc., 128 Meadow St.
New Orleans, La.
New York City, N. Y. Exchange for Educational Films, 729 Seventh Ave.
Omaha, Neb., Educational Film Exchanges of Iowa, 314 S. 13th St.
Philadelphia, Pa., Educational Film Exchange, Inc., Electric Theater Supply.
Pittsburgh, Pa., Educational Film Exchange Inc., of Pittsburgh, 14 Ferry St.

St. Louis, Mo., Educational Film Exchange of Missouri, Inc., 617 N. Grand Ave.
Salt Lake City, Utah.
San Francisco, Calif., Educational Film Exchange of No. Calif., 168 Golden Gate Ave.
Seattle, Wash., Educational Film Exchange of Seattle, 2014 Third Ave.
Washington, D. C., Educational Film Exchange, Inc. Elec. Th. Supply Co.

GOLDWYN PICTURES CORPORATION

Atlanta, A. S. Dickinson, 111 Walton St.
Boston, D. J. Horgan, 42 Piedmont St.
Buffalo, Geo. M. Hickey, 200 Pearl St.
Chicago, Cecil E. Maberry, 207 S. Wabash Ave.
Cincinnati, Jack Stewart, 217 E. 5th St.
Cleveland, W. J. Kimes, 403 Standard Theater Bldg.
Dallas, L. B. Remy, 1922 Main St.
Denver, Ben Fish, 1440 Welton St.
Detroit, J. E. Flynn, Film Exchange Bldg.
Kansas City, W. E. Truog, 17th and Main Sts.
Los Angeles, M. Wolf, 912 So. Olive St.
Minneapolis, Robert Cotton, 16 North 4th St.
New York City, S. Eckman, 509 Fifth Ave.
Philadelphia, Felix Mendelssohn, 1335 Vine St.
Pittsburgh, Nat Barach, 1201 Liberty Ave.
San Francisco, G. C. Parsons, 985 Market St.
St. Louis, Jack Weil, 3312 Lindell Blvd.
Seattle, J. A. Koerpel, 2018 Third Ave.
Washington, D. C., Walter F. Hayner, 714 11th St., N. W.
New Orleans, J. W. Pope, 714 Poydras St.
Omaha, E. J. MacIvor, 1508 Howard St.
Salt Lake City, W. E. Banford, 135 E. 2nd South St.

PATHE EXCHANGE, INC.

Atlanta, 111 Walton St.
Dallas, 1715 Commerce St.
Chicago, 220 So. State St.
Minneapolis, 608 First Ave., N.
New York, 1600 Broadway.
Boston, 13 Stanhope St.
Los Angeles, 920 So. Olive St.
St. Louis, 3308 Lindell Ave.
San Francisco, 985 Market St.
Albany, 35-37 Orange St.
Pittsburgh, 1018 Forbes St.

Cincinnati, 124 East 7th St.
Cleveland, 750 Prospect Ave., S. E.
Oklahoma City, 119 So. Hudson St.
Philadelphia, 211 No. 13th St.
New Orleans, 229 Dauphine St.
Washington, 916-18 G St., N. W.
Kansas City, 1627 Main St.
Denver, 1436 Welton St.
Omaha, 1417 Harney St.
Seattle, 2113 Third Ave.
Salt Lake City, 64 Exchange Pl.
Indianapolis, 66 W. New York St.
Des Moines, 100½ E. Locust St.
Newark, 6 Mechanic St.
Charlotte, 235 So. Tyron St.
Buffalo, 218 Franklin St.
Milwaukee, 174 Second St.
Spokane, 408 First Ave.
Little Rock, 1116 W. Markham St.
Portland, 392 Burnside St.
Butte, 49 W. Granite St.
Baltimore, 420 E. Lexington St.

REELCRAFT PICTURES CORPORATION

New York, Julius Singer, 729 Seventh Ave.
Chicago, Carl Harthill, 207 S. Wabash Ave.
Indianapolis, Geo. W. Wilson, 109 W. Maryland St.
Milwaukee, G. Lawrence Stiles, 107 Second St.
Minneapolis, Harry L. Muir, 306 Film Exchange Bldg.
Also following exchanges releasing Reelcraft pictures:
Atlanta, E. & H. Dist. Co., 73 Walton St.
Boston, Arrow Film Co., 48 Piedmont St.; R. D. Marson Attractions Co., 26 Piedmont St.
Cincinnati, Standard Film Service, Film Exch. Bldg.
Cleveland, Standard Film Service, 217 Sloan Blvd.
Charlotte, Eltabran Film Co., Piedmont Theater Bldg.
Dallas, R. D. Lewis Film Co., 106 S. Cross St.; Special Features Co., 308 Market St.
Little Rock, R. D. Lewis Film Co., 106 S. Cross St.
Oklahoma City, R. D. Lewis Film Co., 114 S. Hudson St.; Tucker Bros. Film Co.
Pittsburgh, Quality Film Co., 414 Ferry St.; S. & S. Film & Supply Co., 414 Ferry St.
Philadelphia, Masterpiece Film Attractions, 1235 Vine St.
Seattle, Greater Features Co., Inc., 2020 Third Ave.
St. Louis, United Film Service, 3628 Olive St.
San Francisco, Consolidated Film Co., 90 Golden Gate Ave.

Syracuse, Dooley Exchange, Inc., 445 S. Warren St.
Washington, Exhibitors Film Exchange, 916 G St.
Toronto, Canadian Exhibitors Exchange, Ltd., 34 Richmond St.

FEDERATED FILM EXCHANGES

Federated Film Exchange, Boston, Mass., New Haven, Conn. Sam Grand, Manager.
Empire State Film Corp., New York City, Buffalo, N. Y. Arthur G. Whyte, Manager.
Masterpiece Film Attractions, Philadelphia, Pa. Ben Amsterdam, Manager.
Quality Film Corp., Pittsburgh, Pa. Harry Lande, Manager.
Standard Film Service, Cleveland, O., Cincinnati, O., Detroit, Mich. Harry Charnas, Manager.
Celebrated Players Film Co., Chicago, Ill. Joe Friedmann, Manager.
Mid-West Dist. Co., Milwaukee, Wis. Ralph Wettstein, Manager.
Merit Film Corp., Minneapolis, Minn. F. W. Thayer, Manager.
United Film Service, St. Louis, Mo. Sam Werner, Manager.
Crescent Film Service, Kansas City, Mo. Al Kahn, Manager.
Supreme Photoplays Corp., Denver, Colo., Seattle, Wash. H. A. Kyler, Manager.
Consolidated Film Corp., San Francisco, Calif., Los Angeles, Calif. David Chadkin, Manager.
R. D. Lewis Film Co., Dallas, Tex., San Antonio, Tex., Oklahoma City, Okla., Little Rock, Ark. L. T. Pellerin, Manager.
Pearce Films, Inc., New Orleans, La., Atlanta, Ga. J. Eugene Pearce, Manager.
Executive offices, 220 W. 42d St., New York.

SAFETY STANDARD FILMS

(Narrow tread—slow burning)

New York City, Pathescope Co. of America, Inc., Aeolian Hall.
Chicago, Ill., Victor Safety Film Corporation, First National Bank Bldg.
Buffalo, New York, United Projector and Film Co.

FILM BROKERS

(Non-Theatrical)

New York City, Film Library Service, 67 West 44th St.

CHAPTER VI

THE INDUSTRY AND THE EXHIBITOR

THE theatrical field boasts rather loudly of about twenty thousand motion-picture theatres. Practically the entire development of the industry has taken place in the last twenty years, in which time it has grown to be the fifth largest single industry in America. Over eight hundred million dollars was spent in 1919 in admission fees to motion-picture theatres. The indications point to gross receipts of one billion dollars in 1921. The average daily attendance is about eleven million persons, and fifty million people have the picture-going habit.

If the industry has grown to these proportions, simply on the support of the theatre, what will it not do with the support of the non-theatrical exhibitors? Does it think these of negligible power? Figures will tell.

A questionnaire sent by the Department of the Interior to schools of all sorts—universities, colleges, normal schools, high schools, and elementary schools—throughout the country, reveals the fact that out of those queried—38,282—1,513 were using educational motion pictures for educational

purposes. This means that four per cent. of the schools of the country are actually using motion pictures as a part of their work. If this percentage holds good for the entire country, which has over three hundred thousand educational institutions, it means that there are twelve thousand exhibitors in the school field alone, on a conservative estimate. Is not the industry which is serving only twenty thousand points interested in twelve thousand more? But this is not all. The experience of men who are in close contact with the field indicates that about one thousand churches are showing pictures today as a regular part of their services. Many more show pictures occasionally and are provided with equipment. This number is rapidly increasing, due to the almost unqualified indorsement of motion pictures by the central organizations of many of the leading denominations. Another thousand exhibitors, for the industry to consider!

Besides the school and the church, there are the Y. M. C. A.'s, clubs, granges, industrial plants, social service organizations, settlement houses, and similar places which are known to be frequent exhibitors, although no figures are available at the present time.

We may safely say, after deducting for possible error, that the non-theatrical exhibitors total ten thousand at the very least, or one-half the number of theatrical exhibitors. Very possibly there are

fifteen thousand. Is it not high time that the industry should take cognizance of the non-theatrical aspect of the business? Why have they not done so?

The great question involved is the relation of the theatrical to the non-theatrical exhibitor.

The following resolutions from the National Convention of Exhibitors of the United States, held at Cleveland in June, 1920, defines the attitude of the theatrical exhibitor:

NON-THEATRICAL SCREENS

"RESOLVED, That this convention go on record as opposing the practice common among exchanges throughout the country of supplying regular feature films and comedies to non-theatrical institutions, and that the producers of the country be asked to restrict the distribution to such institutions of films of a purely religious or educational nature."

SCHOOLS AND CHURCHES

"RESOLVED, That it is the sense of this Committee that we condemn as unfair competition, the leasing or giving free of charge, or by playing percentage any school, church, community house, or charitable organization, of pictures in conflict with the use of such pictures by a motion picture theater.

"It was agreed that the producers should first consult with theater owners before they allow their picture to be shown in any of the above mentioned places and so inform

the society or organization. This does not apply to strictly educational or religious subjects."

Scarcely any one can read these resolutions without saying to himself, "dog-in-the-manger." The theatrical man can not provide for the needs of the non-theatrical audience, as evidenced by the fact that the non-theatrical audience has gone to a great deal of trouble to arrange a show without his help; but still he is determined that the non-theatrical exhibitor shall not be allowed to fill these needs. He cannot eat hay, but he will not let his rival, who can, eat it. And to prevent this rival from getting the "hay," he even goes to the length of boycotting the distributor of the pictures, in certain districts. If the distributor permits himself to be intimidated by such threats, he *will* be dependent for his living upon the theatrical exhibitor, and some one else will get the great volume of non-theatrical business. But if he rents his pictures impartially, as in most cases he seems disposed to do, theatrical and non-theatrical exhibitors may work side by side in harmony, with prosperity attending all three—the distributor and his two customers.

The theatrical exhibitor objects to rental to the non-theatrical man on two grounds: First, the use of features and comedies similar to those shown in the theatres, takes away his customers. Curiously enough, theatrical men do not seem to

realize that the development of the non-theatrical branch will enlarge their own audiences, rather than diminish them. He sees his own house on one corner charging fifty cents admission to see Mary Pickford in "Rebecca of Sunnybrook Farm," and across the street a church with a modest little billboard announcing "Sunday Evening Service: Sermon Followed by Motion Pictures. Admission Free. Next Sunday, Mary Pickford in 'Rebecca of Sunnybrook Farm.'" He visualizes an empty theatre, and all of his patrons in church for a "free show." He thinks no farther. It does not occur to him that the church is creating *new* audiences for motion pictures; audiences that are now seeing motion pictures for the first time; audiences that will be patrons of his theatre next week. Many a conservative has been won over to the motion picture in his own church. Church people who were formerly bitterly opposed to movies in any form, now welcome them with open arms as the saviour of the Sunday night service, and go, themselves, to the theatre during the week. It is not so long since people of education and refinement regarded the motion picture as beneath notice. Even today, only one-half of the hundred million people in the United States go to the theatres. What of the other half? Where are the other fifty million? Surely a considerable proportion of this vast number must needs be attracted to pictures in some other way

than has yet been devised by the clever advertising men who exploit films. Only the narrowest business vision would dictate opposition to the showing of motion pictures freely in schools, churches, and other non-theatrical showing-places which are increasing in number continually.

The theatrical manager voices his second objection in the stipulation that only pictures "of a purely religious or educational nature" shall be given by church and school. But who is to decide what constitutes a picture of a "purely religious or educational nature"? Some of the pictures most desirable for use in school and church, some of the pictures most educational or most religious, are those which the theatre man will exploit as a special program. Does the theatre man think that because "Treasure Island" is mightily entertaining that he can have it all to himself? Perhaps he does not understand that there is a pleasure in the study of technique which to the scholar is as keen as the pleasure in incident. Perhaps he does not understand that when it is shown in the school it will be shown with an entirely different purpose. Does he think when both he and the local minister want to show "The Miracle Man" that if either has a better claim to it, it is the local minister? that he may do better by making his theatre noted as the home of relaxation and amusement? Neither preaching nor teaching is the purpose of the theatre. Box office

receipts are the final criterion of judgment as to the success of the performance, quite rightly. And if the theatre makes money by providing clean, refreshing amusement, the exhibitor may feel that he has accomplished his purpose to the full. It is rarely that such a conflict on a definite picture will occur. Theatrical men demand novelty; the latest pictures; the "biggest" stars; the most elaborate productions, and in general the pictures with the greatest box-office possibilities. On the other hand the school or church does not care for these things in themselves. It simply wants films accurately suited to its purposes—education or preaching or social teaching. Whether the film be old or new; elaborate or simple, is of minor importance compared with its adaptability to the purpose and its success in making the desired point. In case the theatre and the church across the way should want the same picture—there are as good fish in the sea as ever were caught, for the theatre man, and the theatrical exhibitor who is a success in his own way will not begrudge his rival, so-called, a success along a different line.

Theatre and school, theatre and church, theatre and community house should join hands—as in fact they have in many instances—to their mutual advantage. In the very nature of things they are not competitive. They should coöperate to maintain their individual characteristics. With each

supplementing the work of the other, the motion picture can reach its true place as a powerful servant of the community. Since the invention of printing, there has been no instrument of instruction so versatile, so educational, so artistic, so inspiring as that ubiquitous strip of sensitized celluloid, the motion-picture film. Penetrating the remotest spots on the face of the earth; unfolding the innermost secrets of science; enveloping history with romance; religion with reality, and spreading all knowledge by a beam of light across a silver screen, the motion picture has come to its own in the education and advancement of the race. In that capacity, it should be guided and controlled by the school and church, by the leaders of men.

But life is not all learning. Play is important. In that most ancient and loved of arts, the drama, we find the motion picture overwhelmingly popular. Never in history has there been a form of entertainment so universally enjoyed, so widely supported, so increasingly successful. This great new art reposes in the hands of the theatrical exhibitor. On his taste, his judgment, his dramatic sense, his acumen rests the recreational motion picture. As long as he provides the right sort of amusement, he will continue successful; and if he fails, it will not be because of competition from his allies in the non-theatrical field.

And is the non-theatrical exhibitor quite without blame? Has the theatrical exhibitor just grounds for complaint against him? And has the distributor any reason for preferring to rent pictures to the theatre man? It must be confessed that some non-theatrical exhibitors may be charged on both counts.

In the first place, the theatrical exhibitor may justly object to the charging of admission to non-theatre showings. When an entrance fee is charged, the educator or churchman becomes a theatre man and is legitimately the prey of competition. Additional disadvantages to the school or church are that they must face more critical judgments from the audience, that they become subject to various restrictions and taxes, and most important of all, that they sell that which they ought to give.

The distributor, also, has often good reason for preferring to rent films to the theatre. The theatre man is experienced in the matter of films, and he regards them as his profession. He knows what to do with them and he *does* it. He has his machines clean and in running order. He does not mutilate the film through carelessness. He gives it a fair chance by giving it good projection. He does not cut it and misplace the cuts when he reinserts them. He is willing to pay a decent price. He gives the picture publicity. He " puts on " his program as well as he knows how,

deeming the film worthy of the best setting he can give it, all of which acts favorably upon the good name of the distributor. Most of all, he has sufficient respect for the business to know that if he contracts to return the film *immediately* after showing it he is in honor bound to do so.

A film is worthy of respect. In its making and in its distributing there has been done a vast amount of hard work, of complicated detail, of real productive labor which would overwhelm those professional men who scorn business as a mechanical activity which somehow makes money without giving value received.

If the non-theatrical exhibitor treats the exchange man as a fellow-worker instead of as a servant, if he is as prompt and honest as he would be with his grocer or his banker, he will find that the distributor instead of discriminating against him will be anxious for his business, and will do whatever he can, which is a very great deal, to help him in any problem which the motion picture may be of use in solving.

CHAPTER VII

PUBLICATIONS AND BIBLIOGRAPHY

THE motion picture is responsible for a vast amount of "literature" (in the printers', not the academic sense). The periodical literature falls readily into five classes: (1) publicity, (2) trade papers, (3) fan magazines, (4) educational magazines, (5) miscellaneous.

Of perhaps the least value to the non-theatrical user is the publicity, or pufflicity, as one would-be humorist calls it. It does puff, indeed, many a mediocre production in extravagant terms which resemble circus advertising. Expensive booklets, pictures, posters, sheets of printed matter are issued. Such publications are not worthy even of the pictures they exploit, and have become a cry of wolf, wolf to the exhibitors who are supposed to be attracted. Some of this publicity is prepared for exhibitors to use in their local papers, and when you see a headline "Fought Dangerous Criminals to Ease a Mother's Heartbreak," or "Terrific Fight With Ferocious Beast Won By Man Barehanded," you may know that ten chances to one it is the introduction of a bit of publicity on a film showing just around the corner. Hap-

pily, however, the better type of producers are replacing this sort of advertising with more honest and interesting material. Sometimes, in fact, when a production has as a secondary interest geographical, historical, or scientific information, the advertising may be of genuine educational value.

About the trade papers,* much might be written. In order to understand them, a rather long acquaintance and study is necessary. They contain pages of advertising, much news that is obviously publicity, valuable lists of films, reviews of films, advice columns for projectionists, reports of conventions, plans and personal affairs of directors, stars, and distributors. They evidently rely on the sound pedagogical principle of repetition, for the same information in different forms, reappears week after week. This, however, is not wholly a disadvantage, especially if the reader misses a number, as a new picture or a new company is exploited from every conceivable angle. The trade papers to a new reader seem full of almost unintelligible—but not necessarily unintelligent—jargon. They are technical magazines, and full of their own particular terminology. But

* The film trade papers usually refuse to accept subscriptions direct from "laymen." They seem to think that they contain sacred trade secrets, or other matter which only "the trade" should know. For that reason you will find it best to subscribe through some friend in the business or your public library, or buy the paper on the news stand in the film district of your city.

in a short time one learns how to find what one wants.

Just what is there in the trade papers for the non-theatrical exhibitor? The trade papers are written primarily for theatrical exhibitors, but nevertheless the non-theatrical man will find much of interest. In the first place he will learn from advertisements, from pictures, from reviews, the general character of certain classes of material—that the Blank comedies are not fit to be seen, and that Miss Curlytoes always features in her pictures daring skating stunts which are not for the church audience; that old actor So-and-so makes pictures portraying an honest workingman which are genuinely inspiring and uplifting; that the Flitabout scenics contain valuable educational material; and that the "masterpieces" of Director A. Shouter are indeed masterpieces, in spite of the fact that they are described in the same terms as a third-rate piece of "junk film" ten years old. Such an acquaintance will save hours of time in investigating pictures. Besides this general film lore, most of the trade magazines show lists of pictures released during the current three months. It is true that these newer pictures will not always be available to the church or school, but the older magazines will give available films. In the reviews of the trade magazines, there is much of help. There is also much of amusement. The reviewers are writing chiefly from the com-

mercial point of view, and their methods of glossing over some elements of a picture which would probably exclude it from educational use, are refreshingly honest, at least. "This picture," writes one, "will not please the highbrows, but there will be good, honest, screen fans all over the land who will chuckle heartily when the new earl ladles out mashed potatoes like a Mack Sennett comedian, nor care a rap if at another meal corn on the cob is served and made to yield more laughs." The highbrows should be grateful to be forewarned, and told what they will not like, but how are they going to tell what they *can* use? Some of the trade magazines are beginning to be a little kinder to this mysterious "highbrow," and he will soon be able to find reviews of pictures suited to his peculiar needs.

Most trade papers deal with problems of projection and those columns will be found helpful. Any one is free to write to them and the advice column, whether answering one's own or another's question, is generally reliable and stimulating. The editors of these columns are experts on the subject, and one at least, has contributed a book on it.

Trade papers usually are issued weekly, but one publication which comes under this head has a daily service, a weekly issue, and a year book which is the film-man's encyclopedia. This publication is "Wid's." It is beginning to give at-

tention to short subjects, though devoted mostly to features and "big" productions. The non-theatrical exhibitor will not find the year book particularly useful for strictly educational work. It classifies features by producers, by directors, by stars, by cameramen, and contains other information of a similar nature, as well as a few general articles on the problems of the year, such as censorship. But the daily or weekly service will keep the exhibitor closely in touch with the current releases, giving reviews and comments.

Fan magazines, while dear to the hearts of their readers, cannot be said, with one or two exceptions, to "tell the world" anything particularly worth knowing. They deal with the more sensational aspects of motion pictures, and correspond to a certain type of stage gossip which used to be eagerly sought after. The pages of the fan magazines are largely filled by publicity agents of the stars. Stories of methods of taking trick pictures, dangerous scenes, etc., find a place in this sort of magazine. There are a few long synopses of films, and many, many pictures. The advertising, which tells the story of a magazine's circulation, at a glance, is largely of cosmetics, with sometimes a musical instrument or a bit of wearing apparel. The fan magazines are not without merit—indeed, they may be the forerunners of the volumes of criticism which shall be written about the motion picture as a fine art. The fan mag-

azine has been improved very much of late, and has at least the merit of being interesting to its readers.

The educational film magazines, the third type of periodical, are as yet few in number. But they already are growing rapidly and are so genuinely useful to the non-theatrical exhibitor that their growth will undoubtedly continue to be steady and sure. When reading the chapter on selection, you will see how large a proportion of the necessary information for selection the educational film magazines will provide. They give experiences of educators, ministers, and social workers who have used and are using films. They give the theories and suggestions of professional men upon the making and use of motion pictures. They review worth-while pictures and point the way to secure them. They deal with slides and safety films as well as with Standard films. They advertise pictures for all three mediums. They offer services of information to their readers, and give valuable lists and suggestions. The material is confined strictly to what will be of use to the subscribers and the information is careful and reliable. These magazines are one of the desirable alternatives for censorship. Most educational magazines are issued once a month.

Much space is given to the motion picture in the daily press and in the magazines. The New York Times reviews photodramas regularly and

has coördinate with its departments *The Stage, Music, Art,* one called *The Screen.* The lesser newspapers are always full of "fan" columns and publicity material.

Publications of the fashionable type usually devote a page or two each month to a photodrama. The screen in some aspect is almost every month the basis of an article in some reputable magazine.

A considerable number of bulletins come next among the publications. The periodicals have all sorts of purposes in getting themselves before the public; the bulletins are united in aiming at the improvement of the motion picture through informing the exhibitor. The most accessible is the information furnished by the National Board of Review. Besides a bulletin giving approved pictures of the year, classified according to adult and juvenile suitability, they issue lists of pictures for educational, church and semi-religious, and patriotic programs.

The central organizations of various denominations of the church issue suggestions. The organizations using films and making films, such as the Red Cross issue helpful bulletins and lists. Makers of educational pictures issue lists which are, although they are confined to the output of that particular company, extremely valuable as they give the contents and purpose of the films. The government issues bulletins on the subjects treated of in another chapter.

EDUCATIONAL FILM MAGAZINES

EDUCATIONAL FILM MAGAZINE. (*Published Monthly.*) 189 Montague St., Brooklyn, N. Y.

The international authority in the non-theatrical motion picture field. Covering educational, scientific, agricultural, literary, historical, juvenile, government, religious, travel, scenic, social welfare, industrial, news, and cultural motion pictures.

MOVING PICTURE AGE. (*Monthly.*) Class Publications, Inc., Publishers, 418 South Market St., Chicago, Ill.

Covers the field of educational motion pictures as well as of slides and industrial pictures. The emphasis in the editorial policy is essentially practical.

VISUAL EDUCATION. (*Monthly.*) Published by the Society for Visual Education, Inc., Chicago, Ill.

"Devoted to the cause of American Education." Treats of all aspects of visual education, with the chief emphasis on motion pictures. An educational magazine for educators.

NATIONAL THEATRICAL TRADE PAPERS

MOTION PICTURE NEWS. (*Weekly.*) 729 Seventh Ave., New York City.

MOVING PICTURE WORLD. (*Weekly.*) 516 Fifth Ave., New York City.

EXHIBITORS' TRADE REVIEW. (*Weekly.*) 729 Seventh Ave., New York City.

WID'S. (*Daily.*) 71 West 44th St., New York City.

YEAR BOOKS (DIRECTORIES)

WID'S YEAR BOOK. (*Yearly.*) Published in autumn, 71 West 44th St., New York City.

MOTION PICTURE STUDIO DIRECTORY AND TRADE ANNUAL. 729 Seventh Ave, New York City.

SOME "FAN" MAGAZINES

PHOTOPLAY. (*Monthly.*) Published by Photoplay Publishing Co., 350 North Clark St., Chicago, Ill.

MOTION PICTURE MAGAZINE. (*Monthly.*) Published by Brewster Publications, Inc., 175 Duffield St., Brooklyn, N. Y.

SHADOWLAND. (*Monthly.*) Published by Brewster Publications, 175 Duffield St., Brooklyn, N. Y.

Treats the motion picture as an art.

BULLETINS

The following useful bulletins and lists are published by The National Board of Review of Motion Pictures, 70 Fifth Ave., N. Y. C.

1. Monthly Selected lists for family and young people, libraries, schools and churches.
2. A Garden of American Motion Pictures.
3. Best Motion Pictures for Church and Semi-Religious Entertainments.
4. Best Motion Pictures on Americanism.
5. *650 Motion Picture Films* Available for Education. (July, 1919.)
6. Bulletin of the Affiliated Committees for Better Films.
7. Better Film Entertainments: How to Gather and Hold Audiences.
8. Better Motion Pictures for Your Community: How to Obtain Them.
9. Standards and Policy of the National Board of Review.
10. Motion Pictures Not Guilty. Report on inquiry among probation officers of juvenile courts on relation of motion pictures to juvenile delinquency.

CATALOGUES OF FILMS

Most of the exchanges listed in the previous chapter issue catalogues of their own films.

The *Moving Picture Age* gives to all subscribers a "*List of 1,001 Better Films.*"

BOOKS

General

COLLINS, FRANCIS ARNOLD. *The Camera Man. His Adventures in Many Fields, With Practical Suggestions for the Amateur.* N. Y., Century Company, 1916. 278 pp.

CROY, HOMER. *How Motion Pictures Are Made.* N. Y., Harper, 1918. 365 pp. Illustrations, portraits, plates, diagrams.

GRAU, ROBERT. *The Theatre of Science.* N. Y., Broadway Publishing Co., 378 pp. Portraits, plates.

A volume of progress and achievement in the motion picture industry.

HANNON, WILLIAM MORGAN. *The Photodrama: Its Place Among the Fine Arts.* New Orleans, La. The Ruskin Press, 1915. 68 pp.

HARRISON, LOUIS REEVES. *Screencraft.* N. Y., Chalmers Pub. Co., 1916. 151 pp.

A discussion of the art of the motion picture. Plates, facsimiles.

LESCARBOURA, AUSTIN C. *Behind the Motion Picture Screen.* N. Y., Scientific American Pub. Co., 1919. 420 pp. How the scenario writer, director, cameraman, scene painter, carpenter, laboratory man, art director and others contribute toward the realization of the wonderful photoplays of today; and how the motion picture is rapidly extending into many fields aside from that of entertainment.

LINDSAY, NICHOLAS VACHEL. *The Art of the Motion Picture.* N. Y., 1916. The Macmillan Co., 289 pp.

A most inspiring and instructive volume with interesting prophecies—many of which are now being realized.

LUTZ, EDWIN GEORGE. *Animated Cartoons. How They Are Made. Their Origin and Development.* N. Y., Scribner, 1920. 261 pp.

MUENSTERBERG, HUGO. *The Photoplay: A Psychological Study.* N. Y., Appleton & Co., 1916. 231 pp.

"An interesting study, suggestive to all who would know the reasons for the appeal of this 'new art.'" A. L. A. Booklist.

SARGENT, EPES WINTHROP. *The Technique of the Photoplay.* N. Y., 1916 (2nd edition). Moving Picture World.

The best book on how to write scenarios.

MOTION PICTURE IN EDUCATION

CLEMENT, INA. *Teaching Citizenship via the Movies.* A Survey of Civic Motion Pictures and Their Availability for Use by Municipalities. Special Report No. 2. June 26, 1918. N. Y. City Public Library. Municipal Reference Library Notes. Vol. 4, Suppl. Part 2, 323-339 pp.

DENCH, ERNEST ALFRED. *Motion Picture Education.* Cincinnati. The Standard Publishing Company, 1917. 353 pp.

An excellent study of the possibilities and results of pictures in school and church work.

DENCH, ERNEST ALFRED. *Advertising By Motion Pictures.* Cincinnati, The Standard Publishing Co., 1916. 255 pp.

HOOPINGARNER, NEWMAN LEANDER and GEORGE WEHRWEIN. *Visual Instruction Through Lantern Slides and Motion Pictures.* University of Texas, Austin, Tex. Bulletin No. 1730, 1917. 34 pp.

O'BOLGER, THOMAS DENIS. *The Drama, the Photoplay and Edu-*

cation. In University of Pennsylvania Lectures. Free Public Lecture Course. Univ. Lectures. Vol. 3. 156-174 pp. Philadelphia, 1916.

Mechanical

Gage, Simon Henry and Henry Phelps Gage. *Optic Projection.* Principles, installation and use of the magic lantern, projection microscope, reflecting lantern, motion picture machine. Ithaca, N. Y., Comstock Publishing Co., 1914. 731 pp. Bibliography, 693-703 pp.

An authoritative and definitive work.

Hallberg, Josef Henrik. *Motion Picture Electricity.* New York. *The Moving Picture World.* 1914. 299 pp. Illustrations, plates and plans.

Cameron, James R. *Pocket Reference Book for Projectionists and Managers.* N. Y., 1919. 150 pp.

Rathbun, John B. *Motion Picture Making and Exhibiting.* A comprehensive volume treating the principles of motography, the making of motion pictures; the scenario, the motion picture theatre, the projector, the conduct of film exhibiting, methods of coloring films, taking pictures, etc. Chicago, Chas. C. Thompson Co., 1914. 236 pp.

Regulations of the National Board of Fire Underwriters. N. Y., 1915.

Reynolds, Fred W. and Carl Anderson. *Motion Pictures and Motion Picture Equipment.* A handbook of general information. Washington, 1920. Bureau of Education, Department of the Interior. 18 pp.

Richardson, Frank Herbert. *Motion Picture Handbook: A Guide for Managers and Operators of Motion Picture Theaters.* Third Edition, 1916. 702 pp.

The last word on projection. An exhaustive and practical guide to all problems connected with the subject.

Talbot, Frank A. *Practical Cinematography and Its Applications.* Philadelphia, 1913. J. B. Lippincott & Co. 262 pp.

United States Bureau of Education. *Educational Institutions Equipped With Motion Picture Projection Machines.* Washington, 1919. 20 pp. Extension Leaflet No. 1.

Censorship and Surveys

Juvenile Protective Association, Chicago. *Five and Ten Cent Theaters.* Two investigations by the Association. Text by Louis DeKoven Bowen. Chicago, 1911. 12 pp.

National Board of Review of Motion Pictures. *Motion Pictures Not Guilty.* Verdict based on reports from chief probation officers of juvenile courts throughout the United

States on relation of motion pictures to juvenile delinquency. N. Y., 1920.

PENNSYLVANIA STATE BOARD OF CENSORS OF MOTION PICTURES. *Reports, Standards, Etc.* Harrisburg, 1920.

THE CINEMA. *Its Present Position and Future Possibilities.* Being the chief evidence taken by the Cinema Commission of Inquiry, instituted by the National Council of Public Morals. London, Williams & Norgate, 1917. 372 pp.

A splendid volume of extensive and thorough research. It studies, minutely, all aspects of motion picture exhibition with reference to influence on the observer.

MUSICAL ACCOMPANIMENT

LANG, EDITH and GEORGE WEST. *Musical Accompaniment of Moving Pictures.* A practical manual for pianists and organists. Boston, Boston Music Company, 1920. 62 pp.

A lucid exposition of the principles underlying the musical interpretation of motion pictures. Contains many practical examples, musical passages and lists of selections.

PART II
THE EXHIBITOR'S PROBLEMS

CHAPTER VIII

ANALYSIS OF THE PROBLEM—MAKING PICTURES PAY THEIR WAY

THE first question in the analysis of the problem of presenting motion pictures is the ever-present financial one. Experience has proved that it is easily solved if undertaken with a clearly defined plan and executed with energy and enthusiasm.

Charging admission as a means of paying expense is the first thought that occurs to the prospective non-theatrical exhibitor. He promptly pictures himself collecting sufficient funds to pay all expenses and produce an income for his institutions. He sees crowds attending a neighboring theatre, and naturally assumes that they will also attend his presentations. Such assumptions are frequently correct. Motion picture showings often prove extremely productive in financial results. Many a church finds films paying more than the most attractive bazaars, and often a school will make pictures pay for a new set of uniforms for the football team or pay for the projection machine. Furthermore, collecting admission fees is often the simplest way of raising the required funds, providing always that enough

fees are collected. On the other hand, if the weather is unpropitious or unexpected competition develops, the gate receipts may be disappointingly low and result in a deficit.

The arguments against admission fees are numerous. Legal considerations immediately arise. If admission is charged, the exhibition assumes the status of a theatrical performance, and becomes subject to war taxes, local taxes, special regulations for licenses, close government control, etc.

By charging admission, the element of competition with the neighboring motion-picture house immediately arises. The hostility of the theatre man may be aroused. He can complain to the exchanges and perhaps cause curtailment of the supply of suitable films available for the undertaking. Furthermore, audiences are more critical for having paid an entrance charge, even though it is low. They are less charitable in their criticism. If the picture is not equal to that at the local theatre, they will go back to the local theatre. Or even if the picture is as good, if the film breaks or the framing is faulty or time is lost between reels or any one of the numerous trifling irregularities incident to projection occurs, they feel that they have paid too high a price to see an amateur entertainment.

Furthermore, for educational, religious, or community pictures, the charging of admission in-

troduces a spirit of commercialism which robs the work of its fine idealistic purpose and indeed often defeats this purpose entirely. Especially is this true in church work. Surely it is most inappropriate to charge admission to a church service of motion pictures. It makes of the service merely a different kind of entertainment, and it limits the gathering to those who have the price of admission. Admission charges are only advisable when the program is frankly recreational; when the purpose is chiefly to raise money for some worthy cause; and when the pictures are well worth paying to see.

It is not permitted to charge admission to the showing of government films or films loaned by the Bureau of Commercial Economics.

The soundest plan for financing motion pictures is to secure an appropriation for them. Pictures can be booked to great advantage in a whole series, and this is possible if a definite sum is supplied. The minister who secures a portion of the annual budget for motion pictures can then plan his course accordingly.

Occasionally a well-to-do layman will donate a fund to establish a permanent series of picture services. A little publicity pointing to the need in this direction, and showing the splendidly effective influence of pictures on the size of the congregations will often inspire the necessary donation. The giving of still pictures—paintings,

photographs, and windows, to churches is common; why not give motion pictures?

Underwriting is an excellent means of financing both the machine and a series of programs. It is quick and efficient, and it often nets larger funds than any other method. The customary procedure is to hold a large popular meeting—with motion pictures as one of the attractions if possible, and to have a good speaker to explain the plan. It calls for pledges from all who are willing to support the undertaking. The pledges are payable in small amounts, scattered over a reasonable period of time. Pledge cards should be prepared in advance. A good example of a card which was successfully used follows:

FOR ONE HUNDRED PER CENT EFFICIENCY

I hereby agree to contribute the sum of..... dollars toward the purchase of complete motion picture equipment at a price not to exceed $500, and to install weekly film service for six months at a total expense of $500 in....

Date.....

I agree to make payments as follows:

25% on or before.....19... $.....
25% on or before.....19... $.....
25% on or before.....19... $.....
25% on or before.....19... $.....

Name .....

Address .....

(Reverse side.)

RECORD OF COLLECTIONS

Name .....

Address .....

Amounts due.	Notices sent.	Payments received.	Acknowledged by

Another obvious means of paying expenses is by collections. This is wholly legitimate, and according to well-established custom, and has at least the merit of simplicity. Furthermore, experience shows that this method is probably productive enough in the long run. Bad weather, or extraordinarily good weather, or the presence of some heavily competing gathering, or any one of the infinite reasons for people not attending church may cause a precipitate drop in attendance and collections. Meanwhile the pictures must be paid for promptly and lack of funds cripples the work. Collections should not be depended upon unless the church is large and experience with other meetings indicates the certainty of success.

Subscription systems give good results in many instances. Under this plan, tickets for a whole series of programs are sold in advance at a price considerably lower for the series than for the individual showing. This gives a strong incentive to subscribe. Further stimulation to the sales may be gained by offering a commission to the salesmen—or sales children—who dispose of the

tickets. This plan is open to most of the disadvantages attending sale of tickets at the entrance, but it combines with the advantages of admission charges those of underwriting, and has often been used with success.

The plans for money-raising will vary with the community, the attitude of the local exhibitor, and other factors. The school will probably most often finance it from an appropriation; the club from admission or subscription, the church and community in some way that will do away with admission charges, in order to accomplish best their high aims. There are almost as many ways of raising funds, as there are individual institutions.

In the Samuel J. Peters School in New Orleans, the teacher said when interviewed, "We realize that we are the pioneers in this work in New Orleans, and that we will necessarily experience all the trials and difficulties of the explorer in a new field. The boys of the school are salvaging newspapers and magazines to pay for the new equipment."

In Osage, Iowa, at the First Congregational Church, the minister inaugurated a "Pleasant Sunday Evening Service" in place of the usual preaching service. He says, "To this community moving-picture entertainment the children of the Sunday School are given free tickets if they get to Sunday School on time. This

has revolutionized the Sunday School. Before, it was absolutely impossible to begin until fifteen minutes after opening time. Now we begin sharply on time. All others attending these entertainments pay an admission of ten or twenty cents."

Dench in his volume, "Motion Picture Education" gives some interesting instances of money-raising for churches. He says "To build a $20,000 church edifice without being a penny in debt is what the motion picture has accomplished at Bowie, Texas. 'The Alerts,' a Methodist Episcopal Sunday School class, had five months in which to raise the necessary funds, so they went into direct competition with a local photoplay theatre. At first they volunteered to boost his business, but the exhibitor rejected their percentage proposition.

"Fred Paire, president of 'The Alerts,' thereupon rented a building in the business section and equipped it with a home-made screen, borrowing the chairs. Then projection apparatus was purchased and films hired. The films were carefully selected, in order not to conflict with the ideals of the church, and still be sufficiently entertaining to attract the general public. Advertising space was taken in the local newspapers, and the movement aroused so much interest that clubs formed motion-picture parties."

Other successful enterprises of a similar nature

are mentioned by Dench. "Rev. James Donohue, of St. Thomas Aquinas Church, Brooklyn, obtained the money for a parochial school before the building had even been started. The vacant lot which he had in mind he converted into an airdrome. He provided one thousand seats, obtained the necessary apparatus and presented a five-reel daily program. For ushers and ticket sellers he obtained the services of church-members."

"When the Epiphany of St. John's Episcopal Church, Shenandoah, Pennsylvania, was much damaged by a tornado, a repairing fund had to be raised. The aid of the local exhibitor was sought, with the result that an evening was set aside for a benefit under the auspices of the Women's Guild, the members of which sold tickets prior to the show."

The Grace Methodist Episcopal Church, Locust and LaSalle Streets, Chicago, recently had to wipe out a church debt. At one of the regular Sunday services a film dealing with religion was shown. The result was that the required one hundred dollars was collected.

Rev. Roy L. Smith, of the Simpson Methodist Church, Minneapolis, Minn., says, "Simpson Church, Minneapolis, has developed a function called 'neighborhood night,' a regular weekly gathering of old and young, regardless of church connections. The program consists of commun-

ity singing, stories, playlets, children's exercises and *moving pictures*. At the close of the program there is a period of visiting and good fellowship, during which refreshments are frequently served. *No admission is charged, but a collection is taken. Any deficit which is incurred is paid out of the regular treasury of the church.*

"In arranging this program we depend upon pictures for the bulk of the entertainment. The other features are introduced between reels. The pictures present several advantages. (1) They are cheap. Our programs have cost us an average of $10 per week for the past winter. This has been fully met by the collections. (2) The program is easily prepared. No one has to spend long hours 'practising their parts.' (3) They have a universal appeal. We frequently have fifty complete families in our audience, besides scores of fathers or mothers with some of their little folks. (4) They are attractive. We have had as high as 800 and 900 people (for special features) though our average crowd runs from 300 to 500.

"The social period, before and after, gives an opportunity for visiting. A carefully organized committee works systematically to assist strangers in getting acquainted and interested in other activities of the church. . . .

"*We give season tickets which can be obtained without charge,* but misbehavior forfeits the

ticket. Any child asking for a ticket is registered, giving his name, address, church preference and membership, Sunday School membership, etc. Then we notify the officials in the neighboring churches that certain of their children are attending our programs, to avoid suspicion. When tickets are given unconditionally there is no reason why a child should leave another Sunday School to come to us for the sake of the pictures. The names of those who have no Sunday School connections furnish us with a fine list of prospects which are followed up by personal visitation. *We make no admission charge,* because we want to educate the children to *give,* not to *pay.*". . . . "The average church looks upon the investment as a 'luxury' and the fear of incurring an additional expense that must be met through the budget has frightened many a timid board. The projection apparatus must be looked upon as a necessity. The social life of the church must be planned for its own sake and not as a crutch upon which unwilling givers can lean. The maintenance of the year's program should be scheduled through the church budget, and thus made independent of the revenue produced."

In the schools of Chicago, Mr. Hays, Director of School Extension, says, "Our service is carried on in several ways. In some cases community centers procure the films, paying their rental charge out of a local community center

fund, charging a small admission at the door for entrance to these entertainments. In others, individual schools are aided by the Board of Education, either from its purchased list of films or by films rented at a nominal charge, and in some, and in fact most cases, both these methods are combined.

"As we look to the future with the many promising organizations coming into existence, catering to what may be called distinctively school and church film service, we can see how necessary it will be for school boards to make adequate provision in their annual budgets to supply the real needs for this broadened educational service."

In the First Methodist Episcopal Church at La Mesa, California, the pastor, Rev. H. I. Rasmus, Jr., uses the following plan: "We show pictures on the second and fourth Tuesday night of every month. Every boy or girl in attendance at any Sunday School in the city for two successive Sundays previous to the picture show, was given a ticket which admitted him free. This rule holds good for all children under sixteen; and, what is more, they are not allowed to pay their way in—they are admitted *only* by ticket. All persons over sixteen years of age are admitted by silver offering, the offering being used to defray the expenses.

"Immediately there was a decided change noticed in all the Sunday Schools. Our own school

leaped forward with fine rapidity; and even though the Methodists are financing the deal, there are other schools which have benefited more than ours. There are 160 students in our grammar school—and since the sixteen-year-old rule applies mostly to the grammar grade students, it is our best criterion to judge from—and out of the 160 nearly every one is in some Sunday School."

The Rotary Club of Bellingham, Washington, raised funds by contributions at a luncheon called by the committee on boys' work. With the money thus raised, a projector was installed in Liberty Hall for the use of social welfare organizations.

Admissions paid for a Victor Safety Cinema Projector for educational use in the high school auditorium at Corey, Pennsylvania.

A paper sale, held by the pupils of Francis Joseph Reitz High School, Evansville, Indiana, financed the purchase of a machine for the use of the school. Each pupil sold thirty pounds of paper, and the school sold 12,000 pounds in all.

The Educational Film Magazine gives an interesting example of profits from pictures in Kansas City. "Twenty-six public schools in Kansas City are giving movie shows successfully six afternoons and evenings a week. . . . More schools in Kansas City are planning to run pictures following the realization that they pay. 'The Bluebird' was shown to 16,000 persons. It was run at

twenty-one schools to a box office total of $1,431, making a profit of $800. Half of the surplus reverted to the community centers to be used in improving schools and communities. The other half went to the school board to be used in buying educational films."

"On an average Monday night the attendance at the West End Presbyterian Church (New York City) is a thousand or a few over. *No admission is charged,* but a collection is taken up. This rarely falls under $100. In this way the films not only pay for themselves, but leave something in the church treasury. The most popular feature discovered by the church of recent years more than pays its own way."

A benefit showing was given in Johnstown, Pennsylvania, in the high school, to demonstrate a projector, and raise money for its purchase. The event was successful, and a portable machine was purchased, which will be used in the grade schools as well as in the high school.

No admission is charged at the door of the Cleveland Heights (Ohio) High School, where pictures have been shown every Saturday night to audiences that have filled the building. Saturday afternoon pictures are shown to scholars in the grade schools. Silver offerings meet the expenses.

At Campbell, California, the Home and School Club purchased a motion picture outfit largely

from the proceeds of a demonstration program given in the school auditorium. Children were admitted for ten cents; adults for twenty-five cents.

It will be seen from the above instances that there are innumerable solutions to the financial problem. The particular solution for any given institution depends upon local conditions; the success of the undertaking depends upon clear definition of plan and purpose, coupled with good organization and enthusiastic carrying out of the plan.

CHAPTER IX

ANALYSIS OF THE PROBLEM (*Continued*)

EQUIPMENT is the next question to be considered. Do you wish to make permanent installation of motion-picture equipment? Or can you to better advantage coöperate with some other organization possessing the necessary facilities? If a church, shall you use the local theatre or shall you unite for motion-picture services with other churches? If you are a social organization or a community, shall you ask the school to help you out? Perhaps you have already decided to be independent. But you should know that with portable equipment, for instance, coöperation between exhibitors is very easy. And that the use of meeting place other than one's own is a frequent occurrence. We quote a few experiences which may be suggestive.

"When the Shackleton South Pole picture, 'The Bottom of the World,' played Omaha, the management of the Moon Theatre persuaded the High School to close for the day that the pupils might see this really educational picture." If the theatre was willing to "persuade" the school, it

goes to show that coöperation will not be made difficult on that side.

"A. G. Balcom, assistant superintendent of schools, of Newark, N. J., who is in charge of visual instruction in the schools of that city, has assisted in the organization of a Community Service Association for his home town, New Providence, N. J., a village of 1,200 people located about fifteen miles from Newark. The association was formed as a result of a conference of local ministers and public-spirited citizens who felt the need of giving the community a wholesome entertainment once a week through the medium of the film.

"The chapel of the Presbyterian Church was selected as the place to give these programs, because of its central location, and because it has a larger seating accommodation than other buildings of the community. It was decided to put in standard professional projection equipment and to pay for it by popular subscription. . . . Though the management of the association is in the hands of men closely identified with the local churches, it was decided to have weekly programs of a strictly non-religious character.

"At the outset the association decided that it should not be a money-making scheme, but rather an honest effort to provide a program of entertainment and uplift for the community. For the purpose of furnishing music for the pictures a

local orchestra was organized under the direction of H. L. Spicer, the school principal. . . . Familiar songs are thrown on the screen for community singing when reels are changed, a local singer acting as song leader for each program."

Here we have coöperation carried out indeed. A neighboring city official; local churches; public-spirited citizens; a particular church, by the contribution of its auditorium; the public by subscription, and by the orchestra; a school official; local musicians—all had a share in making the program a success.

In the *Moving Picture Age,* from which the last extract is taken, is also an account of Public School center work by the Director of School Extension, Chicago. In Chicago, the community gatherings are housed in the school buildings, a plan followed in many large cities.

Mechanical considerations must be carefully weighed in the original analysis of the problem. A detailed treatment of this subject will be found in Part IV of this volume. The general questions, however, need to be considered here, while the answers will be found later.

(1) What is the size of the hall? Has it a gallery? Has it a booth? Have motion pictures been shown there previously? Upon the size of the hall depends the possible audience, the potential revenue and expense (in some cases), the type of machine to be used, the fire risk, style of

booth, size of screen, amount of current, length of throw, acoustics (if music, singing, lecture is to be used) and numerous other practical considerations. No hall is too large or too small for a motion-picture exhibition, but obviously some are better adapted to the purpose than are others. A gallery is specially desirable because that permits the location of the machine and booth above and in back of the audience. The lack of a gallery, however, need not deter one from presenting pictures. A machine, even though placed on the main floor, in the center of the hall, is inconspicuous because during the showing the lights are out. However, a certain amount of noise results from the operation of even the best machines, causing distraction to the audience. Furthermore, in the case of a fire in the booth—a remote possibility with a modern machine—the resulting smoke is likely to cause a panic, even though there is no real danger. Every effort, therefore, should be made to place the machine where it will be out of sight. A fireproof booth, about six feet square, and six feet high, made of metal, asbestos, or other fireproof material is required by the laws of most communities. If the hall in which you plan to show pictures is not equipped with a booth, you should inform yourself as to the local requirements on the subject.

(2) Is the current direct or alternating? What is the ampere capacity of the switchboard

fuses, that is, is there enough current? If the building is not wired, how far must wires be led from outside?

(3) Is there a projector in the hall? Is it in good condition? Is it standard? Can the hall be completely darkened? Is there a screen of satisfactory size and kind? What is the distance from the booth to the screen, the "throw"? Can you secure a competent, licensed motion-picture operator? The success of a showing depends largely on the accuracy and precision of the presentation. Firm, flickerless pictures are a fundamental necessity for adequate programs.

(4) Has the installation of the booth, machine, and wiring been inspected and approved? Are exit lights required? Do you need permits from the fire commissioner, the police commissioner, the wiring department, the insurance company?

In the selection of a machine, the libraries on the size film fitting that machine should be carefully considered. Libraries on the narrow tread safety film are smaller than those on film for standard projectors and offer less variety of subject. Recently, however, these companies have been taking steps to secure new material. Government films, and most free films are issued on standard tread film, as are of course the releases of the regular exchanges.

It is not uncommon for a small company to set

up in business with a machine taking a particular width of film, and only half a dozen pictures on this stock. Such companies make glowing promises about the films which they are to make, but their claims should be investigated with the greatest care.

In the selection of a hall, not only the mechanical questions but the more subtle ones relating to the audience should be considered. People must feel at home in order to enjoy and benefit from the pictures. They must be surrounded by an atmosphere tending in the same direction as the purpose of the pictures. A comedy in a discarded church, a religious service in a borrowed theatre can not achieve quite the same effect as in their proper environment. Your audience want also to be sure that they will not be crowded out. Since installation is expensive, you should provide a place large enough to accommodate the audience you hope for, as well as the audience you have.

Unless you have a specific purpose in mind, you and your audience may wander through a maze of films which, at the end of the course, makes no definite impression. The great secret of successful use of motion pictures is to know exactly what you want and to stick to it, that is to be *positive,* and *reliable.* You can not make a program that will do everything. Your course of motion pictures must be as definitely shaped to

one end as is a sermon to its text, a chemical experiment to its formula. If your program is for school children, is it merely supplementary, or is it part of some course? If for a community center, is it to be educational or merely to draw people together? If it is for church people, is it to be recreational or religious or instructional? People go to a showing with a preconceived idea of its general character, and they will not respond to a lesson if they have expected an entertainment.

You must also analyze your audience. Are you going to appeal to your audience of the immediate present, or are you considering in your appeal the possible audience you hope to gather? Do they speak English or must they have specially edited films? Will they prefer long features or, as children or transient crowds like those in a park, will they prefer a group of short subjects? Is your audience familiar with motion pictures? If so, what kind? An audience of slum children must be fed on different fare from those of Woodland Corners. The last picture of the course may be the same—but the initial appeal must be different. Audiences who have been fed on sensational pictures must be given pictures sufficiently eventful to hold their attention. Later they can be accustomed to the subtler types of appeal. The college or preparatory school audience, who have seen only the best, or who come half pre-

pared to ridicule, must be given the best—which means that they must be given pictures of genuine and unpretentious ideals, good taste, and "refined" humor. The least touch of extravagant or false idealism will arouse the ironical spirit with which educated people have met and are still meeting the motion picture's advances—a valuable corrective.

Will your pictures be in the form of a course or in disconnected numbers? This should be decided at the beginning. Even if you present disconnected numbers, there should be a certain uniformity. The psychology of presenting serials is good—it is not necessarily that people want to see "how it comes out," but that they want more of the same sort of thing.

Will your course be long or short? Your programs for a short course will probably be more concentrated; for a long course, perhaps interspersed with recreational material. This you should determine before you begin, as otherwise there may be danger of using up all available pictures in the first part of the course. The supply of pictures on certain subjects is rather limited, and should be thoroughly investigated before beginning the course.

Do you live near a film center? The answer to this may determine whether you select your films yourself or employ an agent or agency to do so. The selection of films is difficult enough

at best. If you live near a film center, you may manage it. If you do not, the use of some selective service will relieve you of much trouble. Occasionally the transportation for the remote exhibitor makes rental almost impossible. Government service fills many of these gaps. Sometimes a circuit can be arranged with some one in your vicinity who desires the same type of service, and for two or more showings a film company will send a picture where it would not pay to send for one. Location also determines to some extent the age and condition of films. The comparative age is not a bugaboo to the non-theatrical exhibitor, however—in fact, it may be a distinct advantage, as an old film may be much cheaper than a new one and fully as suitable.

CHAPTER X

SELECTION AND BOOKING

BEFORE the task of selecting a picture even the stoutest heart may quail. But there are many helps at hand for the minister, the teacher, or social worker who wishes to do this for himself.

The first help may come from the makers of the machine you have purchased. Excellent lists are supplied by the manufacturers of most portable projectors; and, in the case of the narrow-tread machines, the agents for such machines offer a complete film service, well suited to many non-theatre needs.

If a film center is near, it is not difficult to keep in touch with the market. The trade papers and educational film magazines (which may often be found in your public library) furnish the best help you can have. Through the trade papers you may secure advance information of good pictures, reviews of pictures as they are released, and a general acquaintance with the work of actors and directors. This learning of *film lore* comes only with a persistent following of the output of the various companies and stars, but

it is extremely valuable for its use in helping you to reject without further ado whole masses of undesirable material, and to know immediately where to turn for the right material. The recommendations of the National Board of Review are helpful, although many will desire a more rigid standard than theirs in selecting pictures for special uses. They have lists of approved pictures for the last three or four years, classified by their suitability for certain purposes such as Americanization.

A third source of information is to keep in touch with what your professional brothers are doing. A clipping bureau will furnish such service —or you may watch the newspapers and professional journals yourself. The educational film magazines abound in material of this sort. You may then advise with the users of the motion picture whom you locate in this way on their methods, success, etc., and sometimes coöperate with them by establishing a circuit, which reduces the cost and trouble.

It may be possible also to pick up a little information from your local theatre-manager as to where to look for the type of films you want.

Most film distributors have at their home office, which is usually in New York, some machinery for assisting non-theatrical exhibitors. It is well in dealing with the exchanges to begin by communicating with the home office, who will prob-

ably send you some material and information not accessible to the local exchange, and then refer you to the local exchange. Your investigation should proceed by viewing at your local film exchange the picture or pictures you propose to use. Most film exchanges are exceedingly courteous about showing films to the prospective user, and in some localities there is a weekly "trade showing" as it is called at the exchange, to which both theatrical and non-theatrical exhibitors are welcome. If it is not possible to see pictures at the local exchange, the "booker" will give you the name of some theatre where the picture is playing on a certain date. You can view it there.

The most careful viewing is necessary. Any part you wish to cut, can be taken out, if it is carefully replaced after showing. Such scenes should be noted at the first viewing, even before you have decided whether or not you can use the picture, since it is exceedingly difficult for the inexperienced viewer to remember and locate such portions without a second viewing.

Advertising and government reels may more safely be chosen without viewing from catalogues or bulletins. Occasionally, however, an advertising reel contains some unsuitable joke or scene, introduced in an effort to popularize the picture. The only safe rule is to view everything.

There are a few pitfalls which may be pointed out to the seeker after suitable pictures. One of

them is the character of advertising matter, which up to the present has taken little cognizance of the needs of the non-theatrical exhibitor. A sensational picture may be exploited more safely by calling it a moral lesson. There are plenty of films with strong lessons. But they are not the ones posted in flaming scenes on billboards. You can find them by looking among the more simple stories recommended in bulletins and reviews. A sensational picture may antagonize where a more tactfully presented truth wins acceptance.

Another trick of advertising is to bolster up a weak or mediocre picture by emphasis on some so-called educational feature. There is plenty of sound educational material without resorting to pictures so advertised.

Children's pictures one would naturally suppose suitable for children. But such is not invariably the case. In cases where a child is the central figure, naughty or dangerous pranks are frequently presented. Surely it is undesirable to suggest to a child that he should climb down a fire-escape or tear up the bedclothes or do any one of the things that he is only too apt to do without suggestion. In versions of fairy-tales, the treatment is frequently too realistic, and cuts are necessary if the picture is to be used.

The greatest danger is in assuming that because one picture of a series or one picture by a

star is suitable, all the rest will be suitable. Such is not always the case. Comedies particularly, vary greatly, and a sense of humor which may treat one subject to your taste may treat another in a manner which is offensive. The work of an actor also varies according to the company and the director making the picture.

The alternative of selection is to use the services of an agent. There are various "clearing houses" in the field. Such agencies will assume all responsibility for the picture either according to your standards or to their own, as you choose, provided your standards are not lax. Advertisement will sometimes secure the services of a reputable viewer who views for several churches and schools. Such agencies usually advertise in the educational film magazines.

Once a picture has been selected, the questions of rental prices and booking contracts arise. This is a more important subject in dealing with the theatrical exchanges than in renting from a non-theatrical concern, where prices and terms are fixed and practically unalterable.

Fixed rental prices are not the rule in the open film market. To be sure, an elaborate scale of prices accompanies each feature, and in theory the price of a film is as definitely fixed as a price tag on a piece of furniture. In fact, this is far from true. A number of varying conditions determine the price. The prospective non-theatrical

exhibitor should be well informed on this point if he is to buy film at a reasonable figure.

The general theory in back of price fixing is that the ability of the exhibitor to pay determines the amount he shall pay. A large house should pay more than a small house because the returns in the first are greater than in the second. The larger the audience, the fewer people are left to view the picture, and the possible future audience is reduced. In a sense, a picture is "worn out" more rapidly by a large audience than by a small one. This is obviously true, and it is entirely just that a theatre should pay a rental price in proportion to its capacity.

But within the general theory that the large house shall pay the large price, and the small house the small price, who shall determine the exact figure? Suppose the large house does a small business, or a low-priced business, and the small theatre receives high admission prices and is constantly packed to capacity, shall the price still be determined by the seating capacity? The answer is not far to seek. The price is determined not by what the exhibitor *must* pay, but by what he is *willing* to pay. He fixes a price limit in his mind, based on his experience as to what he can afford. He knows that he cannot safely pay more than that amount for even the finest picture produced. He goes into the market to buy the best and newest pictures obtainable at *his* price,

and he usually finds that he can get what subjects he wants; but not always *when* he wants them. The increasing age of the picture compels a steady reduction in price and sooner or later brings down the greatest features to humble prices.

The above considerations apply almost wholly to features. But news weeklies, some comedies, and novelties, educationals, scenics, cartoons, screen magazines, and similar material do not drop in price or value so rapidly with the passing of time. They are released at a figure which nets only a fair profit to producer and distributor, and could not be sold higher and would not be sold lower. In a word, they have little or no speculative value; they are the staples of the industry.

It is clearly important that the would-be exhibitor should know exactly what he can pay before bargaining for films, and even before making selections. The exchange salesman will often ask him "What can you pay?" Much time and effort are saved by meeting this question at once. Naturally the buyer must be conservative in his estimate, and if he states a low price, he need not be afraid of being turned away. Surprisingly good material may be bought for a little "real money," if one knows how to go about it. By ordering many pictures at once, by booking in a series, by choosing some of the older pictures,

he may secure more advantageous prices. Weeklies drop in price from week to week, and by choosing a weekly *other* than the one used at the local theatre, and by using it a week older, a considerable saving, which is not sacrifice, may be effected. Films are a speculative commodity, and business acumen plays a large part in the trading.

As to the exact prices which the non-theatrical exhibitor should prepare to pay, the following scale is believed to be fairly accurate. It is the result of experience in renting thousands of reels in all parts of the country. If shown to an exchange man, he may say it is too low, but he is speaking from the standpoint of a man who sells to a wealthy consumer—that is the theatre-man—and he does not yet understand his new non-theatre customer, whose price limit is lower.

AVERAGE NON-THEATRE RENTAL CHARGES

(Basis: One day's showing. The film may be shown as often as desired, afternoon or evening, on the showing date. The price does not include transportation charges.)

TYPE OF PICTURE	AVERAGE LENGTH	RENTAL PRICE
Super Feature	7 reels	$25 to $50
Feature	5 reels	$ 7 to $30
Comedies	2 reels	$ 5 to $10
Scenics	1 reel	$ 2 to $ 5
News Weeklies	1 reel	$ 2 to $ 5
Serials	13 to 26 episodes of 2 reels each.	$ 5 to $10 per episode
Novelties	1 to 2 reels	$ 5 to $10
Safety Films	1 to 2 reels	$0.95 per reel
Misc. Educationals	1 to 7 reels	$2 to $5 per reel

NOTE—One reel runs, at normal speed, about 15 minutes.

When the film is selected and the price and playing date agreed upon, the exhibitor is required to sign a form of lease or booking contract. This is to protect both parties to the agreement. It would be well for the prospective exhibitor to read carefully a standard form *before* signing it. The accompanying blank covers the usual conditions, but there are many other forms in use:

CITY Chicago STATE Ill. DATE Oct. 1, 1921 NO. 50

LEASE WITH SMITH **PHOTOPLAY SERVICE**
(EXCELLENT FEATURES AND SUPERB SERVICE)

Theatre High School Seats 500

Owner City of Chicago Admission free

The undersigned exhibitor agrees to use the following photoplays on the dates specified and at the price indicated on the terms and conditions herein provided.

SERVICE TO BE USED ON DAYS HEREIN MENTIONED			MEMO. OF ACCESSORIES AND PRICE							
SUBJECT	DATE	PRICE	1S	3S	6S	PHOTOS	SLIDES	CUTS	PRESS SHEETS	SUNDRIES
Pollyanna	10/1/20	$25	.30			$1.	50¢			
TOTAL		$25	ACCESSORIES CHARGED FOR IN ADDITION TO FILM RENTAL $1.80							

Deposits received twenty five dollars to apply first Picture

Payments to be made as follows: **PAYMENT COVERING AT LEAST ONE PICTURE MUST BE MADE UPON THE SIGNING OF THIS LEASE (SAID AMOUNT PAYS FOR LAST FEATURE USED.)** All releases must he paid for in advance, at the Lessor's above named Branch Office. The Lessor reserves the right to change the exhibitor's days or to cancel this contract as provided on the reverse side hereof.

Subject to the terms and conditions on back hereof, to which we hereby agree.

THIS LEASE SUBJECT TO APPROVAL OF HOME OFFICE.

All Express charges to be paid both ways by the Exhibitor.
READ CONDITIONS ON THE BACK OF THIS CONTRACT.

Approved: Smith Photoplay Service,

Manager

Salesman

Signed

Exhibitor

THE FOLLOWING TERMS AND CONDITIONS CONSTITUTE PART OF THE CONTRACT SET FORTH ON REVERSE SIDE OF THIS SHEET

TAX CLAUSE:—The Exhibitor agrees that as long as Section 906 of the Revenue Act of 1918 shall remain in force, the Exhibitor shall pay to the Distributor in addition to all other charges, a sum equal to five (5) per cent of the gross film rental, or in the event of a percentage booking, a sum equal to five (5) per cent of the Distributor's share, for all pictures delivered, and or, exhibited under this contract on and after May 1, 1919, such five (5) per cent to be added to the bill for said film and to become due when the items on said bill become due. The Exhibitor further agrees that any default in the payment of said five (5) per cent shall be considered a default in the same way as the non-payment of any other moneys due under and pursuant to this contract.

The Exhibitor agrees that should all or any part of the film herein leased, be lost, destroyed or damaged, general wear and tear excepted, the Exhibitor will pay for the same to the Lessor at the rate of 10 cents per lineal foot for all film lost, destroyed or damaged.

The Exhibitor agrees not to show the film in any other Theatre or Theatres or on any other dates than specified on the reverse side hereof, unless with the consent in writing of the Lessor.

The Exhibitor further agrees that the film herein leased will be returned to the Lessor or shipped to any consignee to be designated by the Lessor, by first express, immediately after the expiration of each day or days'

service rendered in each particular week, during the term of this lease, and in the event of failure of the Exhibitor to deliver said film to such first express the Exhibitor agrees to pay to the Lessor, for each day said film is delayed, at double the rate per day stated in this contract, and to pay any and all damages of the designated consignee for non-receipt of said film and lobby display due to the neglect of the Exhibitor to deliver the same to the first express as above provided.

The Lessor may, at any time or times, and from time to time, at its election, postpone the time or times at which Exhibitor is to use any such release or releases, and any such postponement may be for a period of one, two, three or four weeks, and Lessor shall mail to Exhibitor at least five (5) days' notice of any such postponement.

It is further agreed that in case the production of any of the releases or photoplays herein contracted for is prevented by the illness, injury, incapacity, death or default of any actor taking part in such production or by strikes, lockouts, war, fire, casualty, or any other cause whatever beyond the control of Lessor, Lessor may thereupon and on ten days' notice to Exhibitor cancel this contract and be relieved of all further liability.

It is understood that either party to this agreement may at any time after date of beginning of this service terminate the same by mailing to the other party four weeks' notice.

Lessor shall not be liable for any loss or damage resulting to the Exhibitor by reason of failure or delay in delivering the service and production herein leased when such failure or delay is due to any order or decree of any Court, the ruling of any Censor or Board of Censors, delay or failure of performance by any common carrier,

or to any other cause or causes whatsoever beyond the control of Lessor.

In case either party hereto shall fail to keep, observe or perform any condition of this contract on his or its part to be kept, observed and performed, the injured party shall have and recover of the defaulter as liquidated damages, and not as a penalty, a sum equal to twenty-five per cent. (25%) of the unearned rental price reserved in this contract. This stipulation for liquidated damages is made because of the difficulty of proving actual damages in the event of any such default; the actual damages under such contracts as this being speculative and impossible to ascertain.

IT IS UNDERSTOOD between the parties hereto that no manager, agent or representative of the Lessor has any authority to agree to any alteration or modification of this agreement, except Lessor's Department Manager at its office in New York City.

IT IS EXPRESSLY AGREED that no promises or representations have been made by either party to the other, except such as are set forth herein.

The practice of requiring cash deposits from exhibitors in advance of showings has of late caused considerable discontent among theatre men. However, it is founded on good business judgment, and is entirely just when not abused. The deposit protects the exchange against cancellation of showing date by the exhibitor. Such protection is vitally necessary owing to the steady depreciation in value of films with increasing age and other considerations.

Unfortunately, the deposit plan has been abused by exchange men. They have used the deposits to finance the business of the exchange; and if the exchange failed, the depositor lost his money.

Recent legislation in some states compels the exchange to segregate funds on deposit in a sort of trustee account; and requires that interest be paid on such funds. This protects the exhibitor from danger of loss; and it also protects the distributor from possible loss through cancellation of booking.

The exhibitors' attitude is summed up in the following resolutions adopted at the National Convention of Exhibitors of the United States, at Cleveland, June, 1920:

DEPOSITS

"The Motion Picture Theatre Owners of America in National Convention assembled in the City of Cleveland, denounce the use by the producers of the moneys exacted from the Exhibitors on the pretense that such deposits are necessary to insure the payment of film bills. It is well known that more than one producing company has been financed with capital obtained from Wall Street on the credit of these deposits which did not belong to the Producers, but remained the property of the Exhibitor and could not lawfully be used for any purpose except to secure the payment of film bills.

"The convention also recommended that the various state legislatures adopt a law similar to that now in force in New York State. This law requires all such deposits to be segregated by the Producer or Distributor in a bank

to the credit of the Exhibitor with the interest accrued thereon.

"The convention also adopted a resolution denouncing any deposit system of collecting funds 'more than seven days in advance of the play-date of the picture, irrespective of the time of the execution of the contract or playing date given.'

"It is recommended that this Convention go on record as opposed to the same, and that steps be taken through the proper channels to the end that such practice be discontinued and abolished."

Records of your programs are indispensable. They enable you to avoid duplication. If your use of pictures extends over a period of years, especially in educational work, you may wish to repeat, and it is then essential to know just where to locate the picture wanted.

You should also keep a record of all pictures viewed. You may want a certain picture at another time, even if not at the moment. For instance, in a weekly you may see by chance, there may be some excellent scenes of a playground. Perhaps it may not do for your Sunday School program at the present time, but when you are trying to raise funds for your settlement house a little later it will be just what you want. If the purpose of your motion-picture course changes, or if the price of a film is lowered, records of all pictures viewed will give you an advantage in securing them.

A small card file, with one color of cards for films used, and another for those viewed, should carry the following information: Name of picture, name of star, name of producer *and* of distributor, number of reels, brief synopsis, cuts required. A card file is the simplest form of record. If a film not used at first is later used, a duplicate card of the proper color may be made.

Suggested Record Card

Title		
Star		
Producer		
Distributor		
Cuts: Reel 1		
Reel 2		
Reel 3		
Reel 4		
Reel 5		
Date Viewed		Date Used

(Reverse side contains Synopsis)

Clipping books with suggestions from other exhibitors' use of pictures will also prove useful, since every bit of information is almost sure to be of value to you sometime.

It is also very important to keep records of your dealings with exchanges—lists of orders, contracts, receipts, etc.

The use of a booking sheet will help you if you have many showings of the same picture. It is

easy to keep a complicated routing running smoothly with a device of this kind. Film exchanges and exhibitors who have a chain of theatres always use something of the kind, and if the school-man is showing films in many schools, he can scarcely do without it.

Suggested Booking Sheet

	MON.	TUES.	WED.	THUR.	FRI.	SAT.	SUN.
SCHOOL 1	A	E	D	C	B		
SCHOOL 2	B	A	E	D	C		
SCHOOL 3	C	B	A	E	D		
SCHOOL 4	D	C	B	A	E		
SCHOOL 5	E	D	C	B	A		

Program A - Natural History - Our World as it Appears to the Ant
Program B - Geography - Manufacture of Woolen Goods
Program C - History - Landing of the Pilgrims
Program D - Literature - Evangeline
Program E - Hygiene - A Mouthful of Wisdom

CHAPTER XI

PRESENTATION

GOOD projection and good films do not necessarily make a successful motion-picture exhibition. The results obtained depend largely on the presentation; that is, the advertising, the appearance of the hall, the other features presented at the same time, the emphasis placed by musical accompaniment, lecture, questions, or sermon. Theatre managers go to great lengths to present a film in a manner which will place the audience in a receptive frame of mind before the showing actually begins, and with music and other devices they maintain that attitude to the end. A prelude, elaborately staged and acted, accompanied the first showings of "Broken Blossoms." The ushers were in Oriental costume. The house was decorated with cherry blossoms, beautiful embroidered panels, and various beautiful things of Chinese origin. The air was filled with incense. Such presentations are not within the scope or purpose of the non-theatrical exhibitor, but other means are at hand and should be carefully considered. If a presentation which supplements and strengthens the effect of the picture is

essential in recreational programs, how much more so is that the case when the aim is to inculcate new truths, to stimulate, to inspire,—processes destined to awaken effort on the part of the observer.

The proper angle of observation must be set, and once established, must be maintained from first to last. The same film may achieve or fail simply because of its presentation. This presentation must be honest and consistent. No matter how many times you tell of the entertaining qualities of a picture and hide all other aspects, your presentation has been unsuccessful if your audience arrives to find a purely educational picture. While they might have been eagerly interested in an educational picture,—sufficiently so to come—they will approach the film with a more or less well-defined attitude of hostility if they feel that they have been lured in under false pretenses. If the advertising emphasizes the sensationalism, if the place of presentation is one conducive to sociability, and if the music increases the purely entertaining quality of a picture, you cannot expect a sermon preached about it to be as effective as if the emphasis had been religious from beginning to end.

The first note in the presentation of a program is struck by the advertising. Its general character, the type of subject-matter, the art work, the printing, the method of distribution, convey

an almost unalterable impression upon the minds of the audience-to-be. Indeed, the audience is *selected* by the advertising.

A supply of advertising matter accompanies most motion pictures. It is known in the trade as "paper." The sheets are a standard size—that is, a "one-sheet," the unit basis of all other "paper,"—29″ by 42″. There are also "four-sheets," "six-sheets," etc. Photographs, both in black and white and in colors, are also obtainable. Window cards and small bits of literature assembled in "press books," suitable for insertion in a local paper, are also provided by exchanges.

As most of this advertising is designed for the theatrical exhibitor, the minister, or teacher, or social worker, may wish to exploit quite different angles. For instance, a play suitable for a church, and showing powerfully the essential rightness of being loyal to one's environment, the danger of losing one's manhood by losing one's self-control through anger or the love for strong drink, and the success of self-restraint and sympathy in bringing about the desired ends, is "A Cumberland Romance" with Mary Miles Minter. The suggested theatrical exploitation reads as follows: "An Idyl of the Wild Outdoors Which Charmingly Fits the Little Star"; "A Play of Primal Passions in Which True Love Wins at Last"; "Like a Breath of Air From the Sweet-

Scented Woods." With the exception of the third suggestion, these descriptions are not only inadequate, but misleading from any but the most superficial point of view.

If the exhibitor wishes to advertise the film in his own way, he will prepare a certain amount of printing and advertising matter on his own account. Careful planning, so that the whole job may be let at once to a single printer will enable the buyer to obtain competing bids, and lower prices than would be the case were the work done at scattered intervals. Prepare the cards, programs, tickets, announcements, and other matter at one time. Correct the " copy " before it goes to the printer; that will save expensive alterations when it is set up in type form. Give the printer as much time as possible. He will do better and cheaper work if you do so.

Free publicity can often be had for the asking. Motion-picture exhibitions whether in the theatre, the school, or the church, are considered " news " by most newspapers. These community institutions may confidently look to the local paper for a reasonable amount of editorial space. Editors in general are much interested in the development of the educational film and they will gladly open their columns to announcements of school or church showings.

The audience, once interested by the advertising, must be kept in the right mood to receive

the program. The choice of a hall will do much to make or mar the impression desired. Is your educational picture to be merely a part of class work or is it to be a special event? The choice between the classroom and the school hall as a place of exhibition may determine the answer to the question. Is your church picture to be distinctly religious, or is it to be neighborly, or recreational, or for purposes of study? Are you presenting a community program? Then see that the surroundings are cheerful and friendly. The use of the school-house as a community center is debatable on this ground—at least until the public school shall stand for something more joyful than it does at the present time. Is your purpose to promote Americanism? If so, let that fact permeate the hall. Decorate with flags, use the national colors in your advertising, play patriotic airs. Such exploitation need not be noisy to be effective. The important point is to make the audience realize *why* it is present, from the moment it enters the doors—create atmosphere!

Above all, the pictures should be shown under *comfortable* conditions. Have good air, clear pictures, comfortable seats. If these things apply for grown-up audiences, they are doubly important in showing pictures to children. Children find it most trying to look at pictures for a long period, or at a single picture of more than about one reel, since their power of concentrated attention is not

yet developed. Uncomfortable conditions distract their attention still further, besides being physically dangerous.

A serious problem in the non-theatrical presentation is the period other than that spent in watching the picture. The non-theatrical performance is presumably not continuous, and before the picture begins there may be an interval of waiting. Furthermore, there must usually be an interruption between reels. This difficulty does not arise in the theatres, because they have two or more machines. As soon as number one machine reaches the end of a reel, number two begins on the next reel. But the school and the church seldom have two machines. Therefore, at the end of a reel the operator must remove it and insert another. This operation requires a minute or two—depending on the skill of the operator.

This spare time may be used to great advantage. Community singing, slides pertaining to the subject of the film, or an interval of discussion may prove successful, according to the purpose of the program. *The main point is to keep your audience still attentive to the purpose.* In a recreation program, these intermissions may be treated as they are in the theatre, and neighborliness may be promoted. In an industrial welfare program, "shop-talk" may be most natural and most helpful to the purpose of the gathering. In

a religious program, music or meditation may best preserve the desired atmosphere.

In a program made up of several motion pictures, naturally the sequence is important. In the selection of the program this has doubtless been considered, but it should be reconsidered, and the operator should be instructed so that it shall be carried out as planned. The position of a comedy, for instance, may change the whole atmosphere of the program. Comparison with experiences of others, careful analysis of one's own problems, and careful observation of the effects gained by certain arrangements, will furnish the answer. Any singer or reader knows how definitely the responses of the audience show whether or not their numbers have been placed in the right relation to each other. The person responsible for a program of motion pictures should cultivate the same sensitiveness to response, realizing that on his judgment, as much as on the pictures, rests the success or failure of the program.

Shall the picture be permitted to stand alone? Opinions differ on this point. Many believe that since most people still instinctvely regard the motion picture in the light of a recreation, that a foreword or an explanation is necessary to mark the difference when it is used for educational or religious purposes. Surely most pictures gain by the presentation of *additional* material. One

class of pictures—the industrial—carries its own lecture with it. But even here, a few words of explanation often add to the interest. An aside by the person in charge of an industrial showing—"We use these tools in our department of so-and-so," may add to the interest and vitality and secure the application of the film's message. Theatrical pictures used in a church need careful treatment. The preacher should *see the picture before the service,* and choose hymns and scripture to accord with its subject. When he preaches a sermon on it, he can emphasize the points, as he could not do without seeing the picture. The film *alone* rarely carries the definite application far enough for a strictly religious service, and is not keyed sufficiently high to awaken the response desired by the preacher. This does not apply of course to the strictly religious pictures, but these are somewhat scarce, and the preacher often must use a film of less definite appeal. The use of motion pictures on Sunday evenings is still considered by some as only a bait and in order to refute this charge, a service of which the motion picture is only a part is to be recommended. Whether the pictures should precede or follow the sermon is the subject of many differences of opinion. The natural order is to show the film first, and then discuss it, or draw a lesson from it. Unfortunately, this ideal arrangement sometimes is impracticable because the audience is difficult to hold

after the picture is over. A different kind of attention is required, and some restless spirits are not ready to give it. They rise and depart, confusion and uncertainty reign for a moment, and the sermon is preached at a disadvantage. Most ministers prefer to hold the film until the last part of the service.

In school showings of a purely educational nature, the presentation is extremely important. Indeed, a scientific knowledge of visual instruction is necessary if pictures are to achieve positive results in teaching. Numerous treatises on the subject are available. Some are listed in the bibliography which ends Part I of this volume. It is not within our province to treat this matter in detail, but general conclusions should be presented.

In the first place, the child should be made to understand that the pictures are not wholly for his delectation and amusement. He must be prepared to answer questions on the film, and view it with that in mind.

A monograph or summary of the subject-matter of the film, containing the titles, together with a series of pertinent questions, should be in the hands of the teacher before the film appears on the screen. The teacher reads the monograph, to the class, and follows it with questions. Then the projection of the picture begins. Every scene produces a more vivid impression on the child's

mind, because he knows what to look for. After the showing, every bit of the matter in the film should be covered in questions by the teacher. A repetition of the showing is often advisable, after the questions and answers. This permits an observation of those points which some may have missed—and rare is the person who can not gain something from a second showing.

If the teacher is using a film made for general interest rather than for strictly educational purposes, she may have to supplement the picture as she goes along. This necessity frequently arises from the point of view expressed in the titles, even if the pictures themselves are suitable. In this connection an article by Edwin H. Reeder in the *Educational Film Magazine* may be quoted to advantage. Mr. Reeder, among other very interesting requirements of the educational motion picture used for teaching geography, specifies suitable subtitles, and goes on to say: "As an illustration of what can be done with a title, we will suppose a scene in Holland showing a road which passes over a bridge. The bridge is one of the sort which is raised by hand to let boats pass. Approaching the bridge is a wagon in which sits a farmer on the way to market. Now, if our main theme is to show the physical difficulties under which Holland always labors, our title would read somewhat as follows: 'Because of the low-lying character of the land, the banks

of the canals are very near water level. Bridges are raised in this way.' The eyes of all the pupils are thus directed toward the raising of the bridge. If, on the other hand, the titler saw a chance to raise a laugh in the quaint dress of the old man in the wagon and wrote such a title as this: 'Balloon breeches are the style in Holland,' the scene would lose all of its use to satisfy the aim of the film, because the attention of the children has been called to the wrong thing."

Concerning the advisability of showing music with pictures, the report of the Cinema Commission of Inquiry instituted by the National Council of Public Morals in England says:

"The showing of pictures to musical accompaniment brings into use a second sense concurrently with vision, and answers the highly doctrinaire objection to the use of one sense at a time advanced by certain witnesses against the cinema—an objection equally applicable to hearing music.

". . . The evidence of oculists and others strongly suggests the very great desirability of such (musical) entr'actes in relieving the tendency to ocular strain. The Commission is of the opinion that the interpolation of musical items, whether vocal or instrumental is highly desirable on this ground, especially for the eyes of children. . . .

". . . Good music, well played by competent musicians is much to be desired, but where the provision of this is economically impossible, mechanical records of the best music offer a substitute."

For non-theatrical purposes, other than strictly recreational in clubs and community houses, music is often inadvisable. It distracts the attention from showings designed to educate, and creates an atmosphere of the theatre unsuitable in the school or church. Nevertheless, on occasion, music is entirely appropriate, and even necessary.

Finding suitable scores is not difficult. With most features a " cue sheet " is supplied free of charge. It carries a list of suitable selections and themes, arranged in the order to be followed in presentation. The following sheet may be taken as a typical example: (Courtesy of Goldwyn Pictures Corporation)

UNTIL T. INDICATES—TITLE OR SUBTITLE—FOR CHANGE OF MUSIC
" S. " SCENE " " " "

MUSICAL SETTING *for* "JUBILO." A Goldwyn Picture

Specially selected and compiled by M. Winkler

The timing is based on a speed limit of 14 minutes per reel (1,000 ft.)

THEME: "Jubilo," by Jerome Kern

To be Played until T (Title) or S (Scene)	Length of Scene	No.	Title and Tempo of Musical Composition
S. At Screening	2 min. 20 sec.	1.	THEME

Note: "With railroad effects"

S. Scene of hold-up	55 sec.	2.	Allegro Agitato, Kiefert (for general use)
T. Twilight at the Hardy	4 min. 25 sec.	3.	Intermezzo, Pierne (Allegretto)
S. Interior of cow stable	1 min. 25 sec.	4.	Eccentric Comedy Theme, Roberts
T. He must be a friend of the	1 min. 45 sec.	5.	Scherzetto, Berge (From Symphonette Suite)
T. The first meal he had	2 min. 30 sec.	6.	Impish Elves, Borch (Intermezzo)
T. After sun-up	3 min. 5 sec.	7.	THEME
T. What do you know of this	30 sec.	8.	Continue pp
T. After a week's training	2 min. 10 sec.	9.	Garden of Love, Ascher (Caprice Mod.)
T. I won't let animals	50 sec.	10.	Hurry, Minot (for pursuit or races)
T. I'll feed 'em	1 min. 10 sec.	11.	Pathetic Andante, Vely (for general use)
T. The proof of genuine	1 min. 50 sec.	12.	Budding Spring, Platzman (Moderato Romance)

NOTE: "Effects of speeding auto"

S. Automobile arrives .....1 min. 50 sec....13. Sparklets, Miles (Moderato)
T. The husking metropolis of.....3 min. 35 sec....14. Characteristic Barcarole, Conterno
T. The Homeward trail.....1 min. 15 sec....15. Club Galop, Laurendeau
T. Five hours later.....1 min. 25 sec....16. Sinister Theme, Vely (for scenes of impending danger)
T. The appetite for work.....1 min. 40 sec....17. Capricious Annette, Borch (Caprice Intermezzo)
T. Give us a kiss for old.....3 min. 30 sec....18. Dramatic Tension, Levy (for general use)
T. Midnight .....1 min. 55 sec....19. Andante Appassionato, Castill (depicting dramatic emotion)
T. Tell them you lied.....1 min. 40 sec....20. Agitato, Minot (for scenes of tumult)
S. Train pulls in station.....3 min. 50 sec....21. Misterioso Dramatico, Borch (depicting mystery and agitation)
T. Do I understand that you.....2 min. 35 sec....22. Dramatic Conflict, Levy (Hurry Heroique)

NOTE: "Watch shots"

T. Son, you dry up..... .....2 min. 5 sec....23. THEME

THE END

An excellent general repertoire of suitable picture music is offered by Lang and West in their book, "Musical Accompaniment of Moving Pictures: A Practical Manual for Pianists and Organists." (Boston: Boston Music Company, 1920), from which, with the kind permission of the publishers, we quote the following excerpts:

NATURE

Author	Title
Bull	Melody
Carvel	Daffodils
Clough-Leighter	In the Woodland
Grieg	Morning Mood
Meyer-Helmund	In the Moonlight
Nevin	Country Dance
Nevin	Song of the Brook
Saint-Saëns	The Swan
Seeboeck	The Hunt
Friml	Iris
Lind	Evensong
Bohm	Murmuring Brook
Chaffin	In the Springtime

LOVE THEMES

Bernheimer	Romance
Cadman	Melody
Martel	Angelica
Elgar	Salut d'Amour
Nevin	Love Song
Svendsen	Romance

Bohm	Cavatina
Grieg	I Love Thee
Liszt	Love Dreams

LIGHT GRACEFUL MOODS

Adam	Liselotte
Berger	Capriccietto
Fomin	Lydia
Delibes	Pizzicati, "Sylvia"
Grieg	Anitra's Dance
Gabriel-Marie	La Cinquantaine
Chaminade	Libellules

ELEGIAC MOODS

Debussy	Reverie
Nevin	Romance
Wagner-Liszt	To the Evening Star
Huerter	Yesterdays
Friml	Adieu
Wagner	Dreams
Raff	Cavatina
Rubenstein-Liszt	The Answer

IMPRESSIVE MOODS

Cuit	Prelude in A flat
Whelpley	Prelude
Wagner	King's Prayer from Lohengrin
Wagner	Parsifal selections
Meyerbeer	Torch Dance
Handel	Largo

FESTIVE MOODS

Nevin	Tournament
Verdi	March from "Aida"
Berlioz	Hungarian March
Gounod	Marche Fanfare
De Koven	Wedding March
Chopin	Polonaise Militaire

EXOTIC MOODS

Oswald	Serenade Grise
Adam	The Bim-Bims
Puccini	Madam Butterfly
Tschaikowsky	Danse Arabe ("Nut-cracker Suite")
Gottschalk	Bamboula
Rimsky-Korsakof	Chant Hindou

COMEDY

d'Ambrosia	En Badinant (Chatterbox)
Clarke	A Day' in Paris
Michel	Ninette
Wachs	Nadia
Adam	Lancelot
Bohm	Harlequin Polka
Chadwick	The Frogs

SPEED (Hurries)

Argus	Butterfly Chase
Barnby	Will o' the Wisp
Wachs	A travers l'espace
Chopin	"Minute" Waltz
Bach	Little Fugue Gm

Wagner	Ride of the Valkyries
Bohm	Glissando Mazurka

NEUTRAL MUSIC

Chaminade	Air de Ballet
Grieg	Lyric Pieces
Liszt	Consolations
Friml	Chant Sans Paroles
Gillet	Sweet Caress
Godard	Berceuse from "Jocelyn"
MacDowell	Idyls

WALTZES

Baynes	Destiny
Danglas	On the Wings of Dream
Duval	Viennoise
Delibes	Naila

SPECIAL CHARACTERS AND SITUATIONS

Tragedy

A. Impending

Tschaikowsky	1st movement from Symphonie pathetique
Beethoven	1st movement from sonata pathetique
Rachmaninof	Prelude C sharp minor.

B. Aftermath

Beethoven	2nd movement from sonata pathetique
Massenet	Elegie
Tschaikowsky	3rd movement from Symphonie pathetique

Death

Chopin	Funeral March
Beethoven	Funeral March
Mendelssohn	Funeral March

(N. B.—In the presence of actual death observe silence)

Battle Scenes

Tschaikowsky	Overture 1912

Storm Scenes

Rossini	William Tell

Villainous Characters

Robbers (in drama)	Bizet Smugglers' Chorus (Carmen)
Robbers (in comedy)	Grieg In the Hall of the Mountain King
Sinister villain	Gounod Music of Mephistopheles in "Faust"

Youthful Characters

Mendelssohn	Spring Song
Grieg	Spring Song
Nevin	Mighty Lak A Rose

Old Age

Orth	What the Old Oak Said
Danks	Silver Threads Among the Gold
Hopekirk	Sundown

CHAPTER XII

FIELDS OF UTILITY

THIS chapter is intended not as a prophecy of the future, but as evidence of what the film has done in actual instances. It suggests some of the results and rewards to be obtained by the labor of financing, selecting, and presenting motion pictures. The illustrations chosen are only a few of the many to be found daily in newspapers and magazines.

Several instances have already been given of the power of the film in teaching. An advantage is set forth as follows: "The picture which is thrown on the screen has certain advantages over any other kind. It is large, so that the whole class may concentrate on the same thing at the same time. The teacher may point out the particular thing she wishes the children to observe. Help from the teacher is next to impossible while different members of the class are looking at different things. The darkened room also has its advantages. When a room is flooded with light Johnny is as much interested in what Willie is doing as he is in what the teacher is saying. Perhaps he is even more interested in Mary. When

there is little to be seen except the picture on the screen the attention of the most restless is easily held."

Another obvious advantage of the motion picture in teaching is that it brings to rural schools a record of experiments requiring expensive equipment, to out-of-the-way communities lessons which could not be brought in any other way. The use of films on trucks by the United States Government is a striking example of this possibility. How could expensive exhibits be taken into rural districts and shown to only a few people at a time? But a film record of these exhibits can easily and cheaply go anywhere.

The following account, appearing in the *Moving Picture World* of August 7, 1920, is one of the most satisfactory testimonials for the reason that it is based on a definite investigation. It also seems to answer the charge sometimes made that the film is but a superficial kind of mental training. "Following the unusual interest in the subject of visual aids in teaching, which was stirred up during the past few months, in the New York schools by Ernest L. Crandall, Director of Public Lectures and Visual Instruction, an experiment has been tried which seems to prove beyond a doubt the insufficiency of the printed and spoken word in teaching.

"The tests given by Director Eugene E. Nifenecker, of the Bureau of Reference, Research, and

Statistics, at the request of Mr. Crandall, were conducted in seven schools in different parts of the city, in each of which the 6A grade was taught the geography of South America by means of moving pictures and other visual aids, as well as text. For each of the experimental schools there was chosen a neighboring 'control school' in which visual aids were not used. Two tests were given to each school, the first dealing with locations of countries, mountains, rivers, and other physical features, and the second in questions, some of which required considerable reasoning.

"It is gratifying to those interested in the manufacture of visual aids for the schools to learn that the experimental schools scored above the control schools, for in one case only did the control school outdo the experimental school. The average in the first test was 33.9 credits out of a total of 55 for the experimental group. In the second test the experimental group reached an average of 25.8 out of a maximum of 65, against 18.7 by the control schools.

"In the first test four pupils in the experimental group received scores between 51 and 55, the maximum, 22 from 46 to 50, and 40 received from 51 to 45. The majority received above 30, only one getting as low as 5 credits. In the control group the records show that only one pupil scored between 51 and 55. The majority received 30 or less, and 24 received 5 credits or

less. In the second test the individual scores in both groups were lower, but here again the pupils in the experimental schools scored much heavier than those in the control schools.

"In preparing the questions for the test, a number of teachers of geography in the elementary and training schools submitted questions by request. An attempt was made to avoid questions which might favor the experimental schools, and the questions were such as would test the geographical knowledge that might be expected in the grade chosen for the experiment.

"The moving picture will be used in the New York City High Schools this fall in the teaching of biology."

Instances of motion pictures in churches are innumerable. But after all, that achievement is perhaps slightly different from the success of the film as a preacher. Without doubt it has been used many times to make people feel at home in coming to church, to attract the attention of strangers, even to drive home the truth of a sermon. But does the motion picture preach? A rector who has used motion pictures for "preaching the gospel" answers as follows in the *Moving Picture Age*:

"As one surveys the centuries of Christianity, the truth is brought home to the mind, that one of the weaknesses of Reformation Christianity has been the too long ignoring of the teaching

value of the eye as a medium of approach to the soul. . . . Christ himself was a profound psychologist, for he realized the powerful and undenied entrance to the soul through the eye and taught his wonderful lessons mainly through that medium.

" With him it was the ' candlestick in the Temple,' ' the flowers,' ' the nets,' ' the vine,' ' the sheep,' ' the seed,' ' the child,' etc. All these were things seen and handled, but under his masterly hand and guidance they became the symbols of spiritual realities.

" But you may say, ' The public does not care for the religious picture.' I am perfectly willing to admit the sharing of that doubt three months ago, but our experience has given the lie to that fallacy. The words of the gospeller, 'The common people heard him gladly,' are just as true today as they were in the time of the great Teacher.

" Where ' The Sign of the Cross ' (a story of early Christian times) brought out 550-odd people, the simple picture story of the life of Jesus, ' From the Manger to the Cross ' magnetically drew more than twice that many. Undoubtedly the non-church-attending people are intensely interested in Jesus."

An evangelistic undertaking conducted by the Methodist Centenary Conservation Committee was the showing of a religious picture, " The

Stream of Life," in a Broadway theatre at the noon hour during Easter Week. The theatre was filled to overflowing. This picture has for its theme the experience of a man brought up in a deeply religious home, who becomes worldly, and then through a great grief discovers that he needs God in his life, no matter how virtuously and charitably he lives without Him.

Making friends through motion pictures—can it be done? The following extract from the *Educational Film Magazine* proves it: "In a little mid-western village of about 200 people a young minister took up a pastorate. . . . He was quick to size up his task, and his first discovery was that gambling was rampant among the schoolboys. Petty vices and some that were not quite so petty ruled the lives of the young people. The pastor saw the situation at a glance and called the most influential members of his congregation into a conference. He pointed out that the neighboring large town was the siren which lured the young fellows away from the village continually because there was nothing more than a disreputable pool-room to keep them at home. Neither the church nor the school offered any social or recreational privileges. The pastor opened his church, and after having convinced his board of trustees that the church was failing in its opportunity as well as its duty, he persuaded them to install a motion-picture machine.

"At first educational films were obtained from the State College, but these were later supplemented by carefully selected subjects rented from commercial exchanges. The young people filled the church and gave the minister the opportunity of meeting and knowing them in a social way. Crowds grew so large that the little church could not accommodate all those who came. In the summer months the pictures were shown in the village park. Business men soon noticed that the free motion pictures brought people into the town who, even though they lived in local trade territory, had been going to the neighboring town previously. Motion pictures proved to be the thing that was responsible for almost revolutionary conditions. The pastor was able to use his wholesome influence upon the boys and led them into wholesome sports. He had gained their friendship through his association with pictures, and had substituted innocent pleasures in place of vicious pastimes. So appreciative have been the business men that they agreed to underwrite the enterprise for the ensuing year."

The motion picture was able to make friends when a direct appeal, no matter how tactful, might have been unsuccessful. It offered a positive desirable object, instead of a negative prohibition. To quote from an interview with William Horton Foster, in the *Moving Picture Age*, "The personal element is eliminated. Take for

example the use of a picture story in preaching a sermon in a prison. When the Reverend Mr. Jones preaches to the prisoners, no matter how tactful or loving he may be, he preaches directly at the individual, who almost invariably stiffens himself against him and interposes as many personal barriers as he can. The appeal of the motion picture, however, in such cases is absolutely impersonal. The prisoner does not pity himself as one selected by the individual preacher for reproof, but accepts the proposition presented by the picture as general and makes his own personal application." In the place of honor, in the reception hall of a great motion-picture exchange, used to hang a beautifully illuminated and lettered message of thanks to the exchange from the inmates of a large prison where pictures had been shown. To every person who entered that exchange it was an arresting appeal, a reminder of responsibility, and an inspiration. The motion picture could befriend, educate, and encourage without condescension or particularity. The point of view of an ex-prisoner, given in the *Atlantic Monthly* for August, 1920, confirms this idea. "Exciting in a criminal a new affection or interest is about the surest means of reform I know of, but the moment this is done in a professional way, the charm is lost." The fact that the motion picture is presented as entertainment saves it from being "professional reforming," but who

knows what good effect an appealing child appearing on the screen in some comic action may have? Again, "Possibly, if criminals could be made to witness the harm, distress, and pain they cause, and to bear part of it, the experience might in many cases furnish the necessary swing in the mind to bring about reformation, or at least cessation from crime." How better can they have this experience than to see certain motion pictures? And how better can the new affection for fellowmen and the new interest in life be presented?

One of the most genuinely thrilling stories of modern life is the account by Martin Johnson of how he showed to the cannibals of the New Hebrides Islands the motion pictures he had taken of them two years before.

"They went through the biggest moment of their lives as they saw themselves as they looked two years ago. They cried out the names of each savage as he appeared, and wild was the excitement when they saw a man who had died since the picture was made. . . . Mr. Johnson also showed them pictures of New York, Chicago, and other great cities. For six months we traveled over Malekula, where white men had never trod—from one savage tribe to another we went, and my moving pictures were my passports. Word had gone from one end of the Island to another and we were welcomed to tribes where it would have been impossible to have gone without the films."

Does not this suggest a use for the film in missionary work?

Making new friends at home is another function of the motion picture. Three hundred and eighty large cities in the United States use motion pictures in their community centers.

George J. Zehrung of the International Committee of the Y. M. C. A. describes their Americanization work as follows: "Forty per cent of the programs being provided by our service are being used in Americanization work. American scenery, American cities, and American industries are being used to supplement and illustrate the text and lecture material used in the Americanization classes. An interesting way in which films are being used was noted at one Sunday meeting, where 250 non-English-speaking men representing nine nationalities were witnessing a melodrama. It was the story of a moonshiner in the Tennessee Mountains. For one hour the secretary talked with the picture, reading the titles in very simple English, composing short sentences from the picture action, such as 'The door opens,' 'The man comes out,' 'He looks around,' 'He hears a noise,' 'He grabs the gun,' 'He shoots the men,' 'He is a bad man,' 'He breaks the law,' 'He is not a good citizen,' 'A good citizen will not break the law.' Incidentally the characters were compared and discussed. Those men went home with higher ideals of citi-

zenship that afternoon, and best of all, they had been helped to think in English. Making similar use of industrial, scenic and educational films, these non-English-speaking men and women can be quickly taught to think and speak English about their work, at the store, and in their homes."

This secretary states that the desire to read the titles on the motion-picture films has resulted in an increased membership in his "English to Foreigners" classes.

Numerous other instances could be given of the success of the motion picture in teaching the best ideals of American life . . . clean and wholesome ways of living, of taking recreation, of bettering one's condition.

Educational motion pictures are good business. Mr. Zehrung says "in days long past the artisan produced material, converted it into the finished product and sold it to the consumer directly. The power to produce was a source of joy and made the artisan proud of his skill and also of his produce.

"Today it is difficult for the average worker to have much information concerning source of material, relation of parts, market, or use of product upon which he works. His part no matter how important to the success of the product, is just a 'job.' In the industrial moving pictures, the miner is shown his coal and ore being converted into power, wonderful structures, ships,

and machinery; the miller, his flour being converted into bread and cake; the mechanic, his machines at work in the mines, fields, and factories. . . .

"At one wood-working plant where a film showing the manufacture of wood-boring tools had been shown, it was noticed that the men were taking greater interest in the care of their bits. Groups were found discussing the design and cutting quality of the various makes. After seeing the quality of the material and the care and skill which had been devoted to the making of a perfect wood-boring tool, a greater appreciation had been developed for their own bits."

When the General Motors Company ordered built a city of 950 homes at Flint, Michigan, the DuPont Construction Company, which erected it, provided immediately for the 3,500 workmen a moving-picture theatre.

"The men were prevented from spending sums of money on city amusements and consequently were fresh for the next day's work."

Another enthusiastic user of films in business says:

"Each week the employees of the Roosa stores assemble. . . . They are served with refreshments. Silence is enjoined by a little buzzer and to get all into a receptive mood a good short comedy not shown before in that town,

starts the program. After a moment's intermission in the darkness the film on the morning's theme is shown while a speaker tells the story of the subject.

"This is followed by an open discussion of the subject.

"When the bell calls the employees back to work there are a hundred questions surging in their breasts—a hundred questions, a hundred glints into a new world thrown open for them to explore. The public library and the family bookcase will be ransacked for more information. In a hundred homes that night the lecture will be discussed. To all their friends those clerks will spread the word—will tell of the information gained. And talking so, they bring the concern into mention. Association of ideas means that that concern will come to every hearer's mind when he would buy what it can sell.

"Renting a lantern and chairs twice weekly and hiring an operator for two separate hours, passing out sandwiches and soft drinks bought at wholesale prices, isn't really very expensive—not when viewed in their relation to the increases shown, since the inception of the new plan, on the Roosa balance sheets."

And these exhibitions in a store-room, at a slack hour, with little cost, do more than advertise the firm—they teach their employees salesmanship which is successful because it is based upon knowledge. The films shown show the history of money, various methods of trade, industries, and other subjects calculated to educate the salespeople in selling.

Teaching, preaching, making friends, introduc-

ing new ways of living and working—what else can the motion picture do? It can present facts in a way to command attention. At the Methodist General Conference the Board of Home Missions and Church Extension presented its annual report on the screen. Does this not compare favorably with the familiar oral reports, which even the most inspired statistician can scarcely make compelling? At a hearing of the Illinois Public Utilities Commission, moving pictures were used as evidence of inadequate street car service. Each picture showed congested conditions, packed street cars, etc. "Many scenes showed jammed cars moving away and leaving twenty-five or fifty persons standing on the street. In the picture a crippled man who could not get on a crowded car was forced to pass up eleven cars before he could enter one." Could any verbal report compare with these pictures on the screen? Investigations of the efficiency of certain machines and operations are made and reported by the motion picture, which records what the human eye can not follow, and repeats it more slowly for our benefit. Such investigations and reports have been used in teaching certain trades to blinded soldiers at the Red Cross Institute, Evergreen, Maryland.

That the motion picture can raise standards of taste, by familiarizing people with the best; that it can propagandize; that it can go where the printed word can not; that it can make vivid and

intelligible to all what was formerly understood only by the few;—of all these things there is abundant proof. In this chapter we have been concerned only with actual instances which have been successful. Whole volumes could be written about the possibilities in this field. As the production of motion pictures increases, new uses suggest themselves continually. Without doubt, many of those who read this chapter will originate and later tell about methods of their own—and such is the power of the film, that they can scarcely fail to be successful!

PART III

ONE HUNDRED SUGGESTED PROGRAMS

CHAPTER XIII

ONE HUNDRED SUGGESTED PROGRAMS

Films marked with a star (*) are distributed free except for transportation charges.

NOTE—Films change hands rapidly and frequently. When we went to press the films listed on these programs were distributed by the exchanges indicated, but before this book is off the press, changes of ownership and distribution may have occurred. If you cannot find a film at the exchange mentioned, you can probably locate it through the information department of one of the educational film papers.

Running time for one reel—15 minutes.

1. Programs for Schools

A course for a school year—ten months—is given below. Each program, therefore, covers a month's work, and consists of five pictures of which one is a long feature for a special showing. The other pictures are intended strictly for instructional purposes, and are suitable for the upper grammar grades and high school. They may be used one every week.

FIRST MONTH—SEPTEMBER

NATURE STUDY. Our World as it Looks to the Ant. [*Educational Films Corporation.*] ½ reel

The three kingdoms—animal, vegetable, mineral. Through the microscope we see how all substances belong to one or the other of these three classes.

THE FRIENDLY BEE [*Educational Films Corporation.*]
½ reel

One of the members of the animal kingdom lays up provisions.

GEOGRAPHY. Industries of Our Country. The Manufacture of Woolen Goods. [*Amoskeag Mfg. Co.*] Boston, Mass. 1 reel

One of New England's most important industries.

HISTORY. The Landing of the Pilgrims. [*Atlas Educational Films.*] 1 reel

A story which includes the voyage of the Mayflower, the settlement at Plymouth, and "The Courtship of Miles Standish."

LITERATURE. Evangeline. [*Fox.*] 5 reels

A recent very successful filming of Longfellow's poem.

HYGIENE. Mouth Hygiene. [*Film Library Service.*] 1 reel

How we should care for the teeth and why.

SECOND MONTH—OCTOBER

NATURE STUDY. Wayside Weeds. Birds of the Air. [*Educational Films Corporation.*] 1 reel

GEOGRAPHY. The Story of Steel. [*Goldwyn (Ford).*] 1 reel

HISTORY. To Have and To Hold. [*Famous Players-Lasky.*] 5 reels

Mary Johnston's story of colonial Virginia.

LITERATURE. The Midnight Ride of Paul Revere. [*Atlas Educational Film Co.*] 1 reel

Longfellow's poem screened will give not only an idea of the author's work, but also a lesson in history.

HYGIENE. Pictograph 6063. [*Famous Players (Bray).*] 1 reel

The explanation of the heart and blood is made clear on the screen.

THIRD MONTH—NOVEMBER

NATURE STUDY. The Beaver Prepares for Winter. American Deer. [*Educational Films Corp.*] 1 reel

Here we see how the animals are able to exist in winter, and also how nature protects them by their appearance and their distinct characteristics.

GEOGRAPHY. Cotton Industry in South Carolina. [*Bureau of Commercial Economics.*] 1 reel

HISTORY. Where the Spirit that Won was Born. [*Goldwyn (Ford).*] 1 reel

Views of historic Philadelphia which tell the story of the days of 1776.

LITERATURE. Treasure Island. [*Famous Players-Lasky.*] 7 reels

HYGIENE. Pictograph 6061. [*Famous Players-Lasky.*] 1 reel

"Our Bone Relations" gives an idea of anatomy.

FOURTH MONTH—DECEMBER

NATURE STUDY. Animals in Midwinter. American Bears. [*Educational Films Corporation.*] 1 reel

GEOGRAPHY. Story of Sugar. [*Goldwyn (Ford).*] 1 reel

HISTORY. My Own United States. [*Select Pictures Corporation.*] 8 reels

The times of Hamilton, Jefferson and Burr revealed in a dramatization of "The Man Without a Country."

LITERATURE. A Little Bit of Heaven. [*Goldwyn (Ford).*] 1 reel

For an experiment, let the classes make their own literature for this month, using as a subject this screen journey to Yosemite Valley.

HYGIENE. Pictograph 6074. [*Famous Players (Bray).*] 1 reel

Gymnastics that correct—this number shows how spinal defects may be cured. An incentive to keep well.

FIFTH MONTH—JANUARY

NATURE STUDY. Wonders of Crystallization. Gardens of the Sea. [*Educational Films Corporation.*] 1 reel

GEOGRAPHY. Cutting Up. [*Goldwyn (Ford).*] 1 reel

The meat industry.

HISTORY. The Conqueror. [*Fox.*] 6 reels

The story of Sam Houston.

LITERATURE. Memories. [*Republic Prizma.*] 1 reel

Whittier's "School Days" filmed in color.

HYGIENE. Pictograph 6078. [*Famous Players (Bray).*] 1 reel

Corrective gymnastics explained.

SIXTH MONTH—FEBRUARY

NATURE STUDY. Life of the Reefs. Evolution. [*Educational Films Corporation.*] 1 reel

GEOGRAPHY. Cut and Dried. [*Goldwyn (Ford).*] 1 reel

The story of the lumber industry, from tree to finished lumber.

HISTORY. Lincoln—from Benjamin Chapin Cycle. [*Community Motion Picture Service.*] 2 reels

One of the series depicting the life of Lincoln.

LITERATURE. Hoosier Schoolmaster. [*Atlas Educational Film Co.*] 5 reels

Edward Eggleston's story of Indiana life is a good example of American writing, and shows what can be done with the material at hand.

HYGIENE. Foot Folly. [*Film Library Service.*] 1 reel

Shoe sins and the danger they cause to the whole system.

SEVENTH MONTH—MARCH

NATURE STUDY. Biography of a Stag. Ancestors of the Horse. [*Educational Films Corporation.*] 1 reel

GEOGRAPHY. The Story of Zinc. [*Goldwyn (Ford).*] 1 reel

HISTORY. Lincoln—from Benjamin Chapin Cycle. [*Community Motion Picture Service.*] 2 reels

LITERATURE. Huckleberry Finn. [*Famous Players-Lasky.*] 7 reels

A masterpiece of American literature.

HYGIENE. Pictograph 6012. [*Famous Players (Bray).*] 1 reel

An argument for pure food.

EIGHTH MONTH—APRIL

NATURE STUDY. Enemies of the Garden. Life in Inland Waters. [*Educational Films Corporation.*] 1 reel

GEOGRAPHY. The Story of the Orange. [*Goldwyn (Ford).*] 1 reel

HISTORY. Lincoln—from Benjamin Chapin Cycle. [*Community Motion Picture Service.*] 2 reels

LITERATURE. Les Misérables. [*Fox.*] 8 reels

HYGIENE. Through Life's Windows. [*Atlas Educational Films.*] 1 reel

A study of the eye.

NINTH MONTH—MAY

NATURE STUDY. Babies of the Farm. Babies of the Wild. [*Educational Films Corporation.*] 1 reel

GEOGRAPHY. The Story of a Grain of Wheat. [*Goldwyn* (*Ford*).] 1 reel

HISTORY. After Twenty Years—Porto Rico. [*Community Motion Picture Service* (*Post*).] 1 reel

What we have done with our colonial possessions.

LITERATURE. The Apache Trail. [*Pathé.*] 1 reel

Another exercise in making literature—one of the picturesque regions of our country to be described.

HYGIENE. How Life Begins. [*Carter Cinema Co.*] 4 reels

A serious presentation of the life processes of plants and animals.

TENTH MONTH—JUNE

NATURE STUDY. The Life of the Moth—Animals in Midsummer. [*Educational Films Corporation.*] 1 reel

GEOGRAPHY. Story of Rubber. [*Goldwyn* (*Ford*).] 1 reel

HISTORY. Hearts of Men. [*George Beban.*] 6 reels

History today—the story of a new American and how he learned to love and trust his new country.

LITERATURE. Story of the Willow Plate. [*New Era Films.*] 1 reel

A Japanese legend that is found on our dinner tables.

HYGIENE. Pictograph 2053. [*Famous Players (Bray).*] 1 reel

A lesson in self-defense.

2. Programs for Churches

(Programs I-IV—Religious Teaching)

I

THE MIRACLE MAN. [*Famous Players-Lasky.*] Star: Thomas Meighan. 8 reels

"A good thought can't die—and that's what he was—a good thought." The story of a man who conquered sin and weakness, who made friends of those who intended to injure him, and who made men and women out of wrecks of human life, by the power of faith and love.

II

THE STREAM OF LIFE. [*International Church Film Corporation.*] 8 reels

The story of a man who was what the world calls successful and happy. How he realized that he needed God in his life, and how the finding enriched him beyond all his previous success and happiness, is the motif of the story.

III

THE TURN IN THE ROAD. [*Robertson-Cole.*] 5 reels

That simple courageous religious faith, sometimes that of a little child, carries one further toward truth than a pessimistic philosophy is the message of this story.

IV

THE TOLL GATE. [*Famous Players-Lasky.*] Star: William Hart. 7 reels

The story of Black Deering, criminal and fugitive, who obeyed at last the dictates of right, and atoned for his past life by an act of renunciation for which few men would have had the courage. "And by their fruits ye shall know them."

(Programs V-VIII—Biblical Pictures)

V

From Manger to Cross. [*Vitagraph.*] 6 reels
The story of the life of Christ.

VI

The Chosen Prince. [*United Projector Co.*] (Safety standard film.) 8 reels
The story of David and Jonathan, told in detail.

VII

Joseph in Egypt. [*Educational Films Corporation.*] 4 reels
A screen version of the life of Joseph and his brothers.

VIII

The Good Samaritan. [*International Church Film Co.*] 1 reel
The parable and a modern interpretation of it, combine to make a powerful screen sermon.

(Programs IX-X—Missionary and Social Service)

IX

Martin Johnson Scenic. [*Robertson-Cole.*] 1 reel
A study of South Sea Islanders.

X

The Greatest Gift. [*American Red Cross.*] 1 reel
The ideal of service, traced through all civilizations from that of the Hindus and Egyptians, to our own time. "It is more blessed to give. . . ."

3. Programs for Institutional Work

Orphan Asylum

Feeding the Bears. Pigmy Circus. [*Educational Films Corporation.*] 1 reel

Philippino School Days. [*Famous Players-Lasky.*] 1 reel

How the children on the other side of the world study and play.

Screen Magazine. [*Famous Players-Lasky.*] 1 reel

The Chocolate of the Gang. [*Republic.*] 2 reels

An entertaining lesson in the spirit of democratic co-operation.

Heart of Twenty. [*Robertson-Cole.*] Star: ZaSu Pitts. 5 reels

The story of a lonely girl who won happiness by "thinking of others," even to dancing with the village "fat boy." A humorous, unusual story, full of clever characterizations.

Home for Aged

News Weekly. 1 reel

A Day with John Burroughs. [*Republic (Prizma).*] 1 reel

A reel depicting in color some of the activities of the aged naturalist.

The Last Leaf. [*Vitagraph.*] 2 reels

Sometimes it isn't the big thing we have failed to do, but the little kindness that comes naturally, which means our success. O. Henry tells the story of an old man who redeemed his life from being a failure by the spirit of friendliness.

The Fotygraft Gallery. [*Famous Players-Lasky.*] 1 reel

A delightful comedy, based on that painful ordeal of the "fotygraft," as imagined by Cartoonist Briggs.

JUBILO. [*Goldwyn.*] Star: Will Rogers. 5 reels

A story of the country, of an old farm, of a tramp who came to the back door and somehow found it home, and of how a good time came to him and those about him, just as in the song.

HOSPITAL

ME AND MY DOG. [*Educational Films Corporation.*]

A man and dog adventure in the mountains together. 1 reel

SCREEN MAGAZINE. [*Famous Players-Lasky.*] 1 reel

EDGAR'S HAMLET. [*Goldwyn.*] 2 reels

The joys and sorrows of a "show" in the barn, as experienced by Edgar Pomeroy, a typical boy, and one of Booth Tarkington's best creations, will provide entertainment long after the screen is dark and the patients have returned to their rooms.

CONVALESCENT HOME

POLLYANNA. [*United Artists.*] Star: Mary Pickford. 7 reels

No one can cling to an ill longer than necessary after seeing Pollyanna get rid of her own and other people's by a determinedly cheerful outlook and a lot of courage.

REFORMATORY FOR GIRLS

THE CHEATER. [*Metro.*] Star: May Allison. 5 reels

From Henry Arthur Jones' play, "Judah"—of a girl who tried to cheat, but found, because some one believed in her, that it was better to be honest.

REFORMATORY FOR BOYS

BILL APPERSON'S BOY. [*First National.*] Star: Jack Pickford. 6 reels

A story that appeals to all those fine things in a boy's nature—the things that may belong just as much to the "bad boy" as to the "good boy."

PRISON

THE POPPY GIRL'S HUSBAND. [*Famous Players-Lasky.*] Star: William Hart. 5 reels

The story of a man who at last found the right road, even after the whole world seemed against him.

OUR TEDDY. [*First National.*] 8 reels

A screen biography of a great American—Theodore Roosevelt.

4. Programs for Community Centers

RURAL COMMUNITY

NEWS WEEKLY. 1 reel

*A YEAR WITH THE FLOCK. [*U. S. Dept. of Agriculture.*] 2 reels

The duties of a shepherd—how to select good sheep and how to care for them.

INDEPENDENCE, BY GOSH. [*Famous Players-Lasky.*] 2 reels

James Montgomery Flagg's clever comedy of an old couple who found that no place on earth afforded real contentment except the old home farm.

NEWS WEEKLY. 1 reel

TRUE HEART SUSIE. [*Famous Players-Lasky.*] 5 reels

A romance of country life that comes to a happy end because of patience and loyalty.

NEWS WEEKLY. 1 reel

*GOVERNMENT POULTRY FARM. [*U. S. Dept. of Agriculture.*] 1 reel

From eggs to chickens—practical helps for the farmer on every question.

*Drying Fruits and Vegetables. [*U. S. Dept. of Agriculture.*] 1 reel

Suggestions to housewives which will increase the family income.

Danny Asks Why. [*Community Motion Picture Service.*] 2 reels

A "human" story of boys which appeals to the family audience.

For any Community

Jes' Call Me Jim. [*Goldwyn.*] Star: Will Rogers. 5 reels

This story is not only entertaining, but it suggests a community's responsibility for the conduct of the institutions within its borders, as well as the good that may be done by neighborliness.

The Copperhead. [*Famous Players-Lasky.*] Star: Lionel Barrymore. 8 reels

The story of Milt Shanks, the man who to help save his country was willing to pose as a traitor. One of the great photodramas.

Suburban Community

Pictograph. [*Goldwyn (Bray).*] 1 reel

Miscellaneous information and entertainment.

*Home Gardening. [*U. S. Dept. of Agriculture.*] 1 reel

Proper methods for city and suburban vegetable gardens, and some examples of successful ones.

Baby Marie's Round-up. [*Pathé.*] 2 reels

If you want anything done, secure the help of a baby, and success is assured!

NEWS WEEKLY. 1 reel

HOME MADE. [*Goldwyn (Ford).*] 1 reel

The making of portable houses—an inducement to own your own home.

THIEF OR ANGEL. [*Community Motion Picture Service.*] 2 reels

A story which creates a strong sympathy for the unfortunate among city dwellers, and arouses a sense of responsibility toward them.

JUST NEIGHBORS. [*Pathé.*] 1 reel

An uproarious comedy with a lesson in neighborliness.

CITY COMMUNITY CENTER OR SETTLEMENT HOUSE

SCREEN MAGAZINE. [*Famous Players-Lasky.*] 1 reel

*OUR CHILDREN. [*Children's Bureau, U. S. Dept. of Labor.*] 2 reels

A half hour of valuable instruction and advice concerning child welfare, presented acceptably.

MARRYING OFF DAD. [*Community Motion Picture Service.*] 2 reels

How one domestic problem was solved by the kindly interest of a next door neighbor.

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*SUMMER HOME ON THE SIERRA NATIONAL FOREST. WATER FOR CITIES FROM NATIONAL FORESTS. [*U. S. Dept. of Agriculture.*] 1 reel

An intelligent understanding of the resources of the country, and how the government makes it possible for the individual to enjoy them is necessary to good citizenship.

SCHOOL DAYS. [*Goldwyn (Ford).*] 1 reel

The development of the modern school, as portrayed on the screen, will make keener one's appreciation of the public school system of the country.

SCREEN MAGAZINE. [*Pathé.*] 1 reel

THE QUACK DOCTOR. [*Famous Players-Lasky.*] 2 reels
A genuine comedy, brimful of action.

NEWS WEEKLY. 1 reel

WHAT UNCLE SAM WILL DO FOR TWO CENTS. [*Goldwyn (Ford).*] 1 reel
The story of the post office.

MOUTH HYGIENE. [*Film Library Service.*] 1 reel
A hygiene lesson showing the disastrous results of neglecting the teeth, and how to care for them properly.

THE DEMAND OF DUGAN. [*Community Motion Picture Service.*] 2 reels
A drama of boyhood, of interest to all ages.

5. Programs for Industrial Organizations

Noon hour recreation and education is the object of these programs. The wool industry has been selected as an example to show how each worker may be given an idea of the whole process, as well as his own particular work. Any industry may be followed from beginning to end in a similar way. Alternate programs afford an idea of some other line of work.

I

*LAMBS FROM RANGE TO MARKET. [*U. S. Dept. of Agriculture.*] 1 reel

SOLID CONCRETE. [*Vitagraph.*] 2 reels
The ludicrous experiences of a worker in a concrete plant carry one at a bewildering speed from one mishap to another.

II

FOOT FOLLIES, Pictograph 6079. [*Famous Players (Bray).*] 1 reel

A brief lesson in hygiene.

*HELP WANTED. [*U. S. Dept. of Agriculture.*] 1 reel

The need for city men on the farm.

MUTT AND JEFF. [*Fox.*] 1 reel

Comedy cartoon.

III

CARELESS AMERICA. [*Universal.*] 1 reel

A lesson in safety first.

*FROM WOOL TO CLOTH—1. [*U. S. Dept. of Agriculture.*] 1 reel

Wool sorted, weighed and purchased.

BURGLARS. [*Famous Players-Lasky.*] 1 reel

What happened when some small boys were left to keep house will be more amusing to the audience than it was to their parents.

IV

MAKING THE DESERT BLOSSOM. [*American Red Cross.*] 1 reel

The transformation of the great American Desert into fertile country affords an idea of the interest of the occupations of engineering and farming.

SISTERS OF THE GOLDEN CIRCLE. [*Vitagraph.*] 2 reels

O. Henry's story of human nature corroborates the truth about Judy O'Grady and the Colonel's lady.

V

*FROM WOOL TO CLOTH—2. [*U. S. Dept. of Agriculture.*] 1 reel

Wool sorted again, cleaned, carded and wound.

TRANSIENTS IN ARCADIA. [*Vitagraph.*] 2 reels

Another O. Henry story. The experiences of two young people in imitating the Arcadia of the wealthy did not prevent them from finding pleasure in their own circumstances, when they laid aside the deception.

VI

*THE HUMAN SIDE OF INDUSTRY. [*Metropolitan Life Insurance Co.*] New York City. 1 reel

Welfare work for the employees of this great organization.

SILK INDUSTRY. [*Pathé.*] 1 reel

Another textile industry reviewed on the screen.

MUTT AND JEFF. [*Fox.*] 1 reel

VII

*WOOL TO CLOTH—3. [*U. S. Dept. of Agriculture.*] 1 reel

Wool twisted into yarn, woven and made into finished cloth.

TESTING THE SOIL. [*Famous Players-Lasky.*] 2 reels

A comedy worthy of the name!

VIII

TO SUIT MAN. [*Goldwyn (Ford).*] 1 reel

The tailor's skill makes the finished cloth into clothes.

THE LAND OF OPPORTUNITY. [*Select.*] 2 reels

A story of loyalty to friend and nation, told in an incident of the life of Lincoln.

IX

*THE ROMANCE OF RAGS. [*Certain-teed Products Corporation.*] Boatmen's Bank Bldg., St. Louis, Mo. 1 reel

One of the later uses of wool.

SCREEN MAGAZINE. [*Famous Players-Lasky.*] 1 reel

MUTT AND JEFF. [*Fox.*] 1 reel

X

PICTOGRAPH. [*Goldwyn (Bray).*] 1 reel

*INSIDE THE BIG FENCE. [*Western Electric Co.*] 195 Broadway, New York City. 2 reels

The opportunities and assistance offered by a great organization to the man who wants to succeed.

6. Programs for Y. M. C. A. and Y. W. C. A.

I

ALARM CLOCK ANDY. [*Famous Players-Lasky.*] Star: Charles Ray. 5 reels

A clean amusing story of an unsuccessful young man, who, partly by blundering, and partly by courage, became successful.

II

PICTOGRAPH. [*Goldwyn (Bray).*] 1 reel

A WILD GOOSE CHASE. [*Goldwyn (Ford).*] 1 reel

Hunting with a camera.

EVERY SWIMMER A LIFE SAVER. [*American Red Cross.*] 1 reel

Something that every one should know.

HIGH AND DIZZY. [*Pathé.*] 2 reels

A dizzyingly rapid succession of really funny events.

III

ONE THING AT A TIME O'DAY. [*Metro.*] Star: Bert Lytell. 5 reels

A curious specimen of humanity was O'Day—as awkward and forlorn as one feels in one's most desolate moments.

How he won his success in a circus—and not as the clown, either—is as inspiring as it is funny.

IV

PATHÉ REVIEW. [*Pathé.*] 1 reel

*FINE CABINET MAKING. [*Brunswick-Balke-Collender Co.*] Chicago, Ill. 1 reel

A glimpse of fine workmanship that suggests a new interest in one's own work.

A CALL LOAN. [*Vitagraph.*] 2 reels

An O. Henry story.

SATURDAY. [*Famous Players-Lasky.*] 1 reel

The joys and sorrows of a small boy, on that momentous day of the week.

V

SAND. [*Famous Players-Lasky.*] Star: William Hart. 5 reels

A hero who has plenty of it—and what he does with it.

VI

NEWS WEEKLY. 1 reel

MAIDS, MORE MAIDS, AND MERMAIDS. [*Educational Films Corporation.*] 1 reel

Health and inspiration from an outdoor vacation.

AN EQUAL CHANCE. [*National Organization for Public Health Nursing.*] 2 reels

The great question of public responsibility for public health.

PRIDE AND PO'K CHOPS. [*Famous Players-Lasky.*] 2 reels

James Montgomery Flagg's satirical comedy of the proud Southern beauty and her patrician papa.

VII

A Cumberland Romance. [*Realart.*] Star: Mary Miles Minter. 5 reels

A romance—that ends in a surprise, for the romance takes the true way that is stronger and often better than the time-worn stage and fiction way.

VIII

Making a Box of Candy. [*Goldwyn* (*Ford*).] 1 reel

Screen Magazine. [*Famous Players-Lasky.*] 1 reel

A Friendly Call. [*Vitagraph.*] 2 reels

An O. Henry story.

The Good Sport. [*Photo Products Export Co.*] 1 reel

What a girl can do by "standing by" in time of need is the theme of this story by James Montgomery Flagg.

IX

Amarilly of Clothesline Alley. [*Famous Players-Lasky.*] Star: Mary Pickford. 5 reels

A little girl learns and teaches the lesson of content.

X

Yes or No. [*First National.*] Star: Norma Talmadge. 7 reels

A memorable lesson to every woman who sees it—a living, modern characterization of the "virtuous woman whose price is above rubies." One of the best pictures of the year.

7. Programs for Men's Clubs and Women's Clubs

I

NEWS REEL. 1 reel

PICTOGRAPH. [*Goldwyn (Bray).*] 1 reel

VOCATIONAL TRAINING FOR BLIND SOLDIERS. [*American Red Cross.*] 1 reel

THE VENTURERS. [*Vitagraph.*] 2 reels

Two men seek to find an adventure in a world grown tiresome—and O. Henry tells the surprising result.

II

THE BOTTOM OF THE WORLD. [*Robertson-Cole.*] 5 reels

The photographic record of Sir Ernest Shackleton's trip to the South Pole.

III

TOM SAWYER. [*Famous Players-Lasky.*] Star: Jack Pickford. 5 reels

The boyhood friend of all Americans, Tom Sawyer, is to be found on the screen unchanged.

IV

NEWS-REEL. 1 reel

GOOD ROADS. [*Goldwyn (Ford).*] 1 reel

A civic problem.

MARTIN JOHNSON SCENIC. [*Robertson-Cole.*] 1 reel

A remarkable record of a journey among savages of the South Seas.

SQUARED. [*Famous Players-Lasky.*] 2 reels

One of the last and best of Sidney Drew's comedies.

V

RED HOT DOLLARS. [*Famous Players-Lasky.*] Star: Charles Ray. 5 reels

A story of a steel town and a young man who was bound to come out on top.

VI

NEWS WEEKLY. 1 reel

*TO MARKET, TO MARKET. [*U. S. Dept. of Agriculture.*] 1 reel

How the housewife may buy most economically.

AWAKENING OF CECILY. [*American Red Cross.*] 2 reels

The story of a woman who found a new interest in affairs outside her home by partaking in the many activities of the Red Cross.

BEATING CHEATERS. [*Famous Players-Lasky.*] 1 reel

A young couple devise an ingenious scheme to beat the high cost of living.

VII

PRUNELLA. [*Famous Players-Lasky.*] Star: Marguerite Clark. 5 reels

Prunella screened is almost more exquisite than Prunella staged, and is particularly suitable for an audience of women.

VIII

PATHÉ REVIEW. [*Pathé.*] 1 reel

MEAT AGAIN. [*Goldwyn (Ford).*] 1 reel

The meat and butter industries.

THE CHURCH WITH THE OVERSHOT WHEEL. [*Vitagraph.*] 2 reels

A story based on one of the community problems which women can help to solve.

A Rainy Day. [*Famous Players-Lasky.*] 1 reel

Every one who is acquainted with small boys will appreciate this comedy which is based on the cartoons of Briggs.

IX

Home Wanted. [*Community Motion Picture Service.*] Star: Madge Evans. 5 reels

The story of an orphan child, which will go straight to a woman's heart.

X

Romance. [*United Artists.*] Star: Doris Keane. 7 reels

A superbly artistic performance of Edward Sheldon's play.

8. Programs for Boys and Girls

I

Making 100-Ton Guns. What Form Means to an Athlete. [*New Era Films.*] 1 reel

Knights of the Square Table. [*New Era Films.*] 4 reels

A splendid story of the age-old "gang-spirit" and how some Boy Scouts proved that it is better to right wrongs than to do wrongs.

II

News Weekly. 1 reel

*Uncle Sam's Pig Club. [*U. S. Dept. of Agriculture.*] 1 reel

Every boy loves a "club" and here is a suggestion for one that will be profitable.

PICTOGRAPH. [*Goldwyn (Bray).*] 1 reel

An answer to some of the many questions every boy asks.

SHIFT THE GEAR, FRECK. [*Community Motion Picture Service.*] 2 reels

A "Judge Brown" story of and for boys.

III

HUCKLEBERRY FINN. [*Famous Players-Lasky.*] Star: Lewis Sargent. 7 reels

Huck Finn himself, comes to life on the screen, for the indescribable delight of boys.

IV

NEWS WEEKLY. 1 reel

THE DAYS OF REAL SPORT. [*Goldwyn (Ford).*] 1 reel

The work and play of the Boy Scouts.

MADE GAME. [*Goldwyn (Ford).*] 1 reel

The making of sporting goods.

PASSING OF THE CROW. [*Educational Films Corporation.*] 1 reel

Real Indians! Just what boys want!

SECRET SOCIETY. [*Famous Players-Lasky.*] 1 reel

Brigg's "Skinnay" in one of his most amusing adventures.

V

TREASURE ISLAND. [*Famous Players-Lasky.*] 6 reels

An interpretation of Stevenson's classic that will make many new Stevenson readers and furnish the same breathless thrills to the old readers that they received in reading the book.

VI

SEEING IT THROUGH. [*Robertson-Cole.*] 5 reels

This quaint characterization by ZaSu Pitts and wholesome exciting story will give girls something out of the ordinary to think about.

VII

NINES AND A HALF. [*Goldwyn (Ford).*] 1 reel

The making of silk stockings.

THE EAGLE AND THE FAUN. [*Educational Films Corporation.*] 1 reel

An Indian romance.

AMERICA JUNIOR. [*American Red Cross.*] 2 reels

A story of the organization of a Junior Red Cross—how it was accomplished and what it did.

THE MATINEE GIRL. [*Photo Products Export Co.*] 1 reel

A clever satire by James Montgomery Flagg on some foibles peculiar to young girls.

VIII

ANN OF GREEN GABLES. [*Realart.*] Star: Mary Miles Minter. 5 reels

A sympathetic presentation of the popular girl's story.

IX

NEWS WEEKLY. 1 reel

EVOLUTION AND ADAPTATION. [*Educational Films Corporation.*] 1 reel

A bit of natural history.

GOOD TO EAT. [*Goldwyn (Ford).*] 1 reel

Behind the scenes in a hotel kitchen.

THE PURPLE DRESS. [*Vitagraph.*] 2 reels

A simple, but strong story of what one girl did for another.

X

LITTLE WOMEN. [*Famous Players-Lasky.*] 7 reels

An attractive screen version of this New England story of fine ideals.

9. Programs for Younger Children

I

WILD BABIES. FARM BABIES. [*Educational Films Corporation.*] 1 reel

SCHOOL DAYS. [*Educational Films Corporation.*] 1 reel

Dolls who walk and move like real people demonstrate the joys of school-going.

TOMMY'S TEMPTATION. [*Educational Films Corporation.*] 1 reel

A cartoon showing how Tommy loyally cared for his little sister in spite of temptation.

II

QUAINT PROVINCETOWN. MICROSCOPIC POND LIFE. LITTLE RED RIDING HOOD. [*New Era Films.*] 1 reel

Views of a town that is like a toy, revelations of the many little creatures that live in a drop of water, and a charming version in silhouette of the old fairy tale.

FEEDING THE BEARS. TURTLES. [*Educational Films Corporation.*] 1 reel

THE PIED PIPER. [*New Era Films.*] 1 reel

Another fairy tale arranged for the screen.

III

RED RIDING HOOD. [*Wholesome Films Corporation.*] 4 reels

A child fantasy containing little Red Riding Hood and many other familiar figures like Santa Claus, fairies, and the four-and-twenty blackbirds who stepped out of the pie.

IV

PIGMY CIRCUS. FEEDING ANIMALS. [*Educational Films Corporation.*] 1 reel

BROWNIE'S BUSY DAY. [*Universal.*] 1 reel

A dog story that will appeal to every child.

PUSS IN BOOTS. [*Educational Films Corporation.*] 1 reel

A clever arrangement of Puss in Boots, played by animated dolls.

V

TWINKLE, TWINKLE. [*Wholesome Films Corporation.*] 5 reels

A story of the star prince, who, for being unkind to his mother, was obliged to wander through the world poor and ugly. By kind deeds, however, he recovered all that he desired and won a beautiful princess.

VI

OLD NEW ENGLAND. [*Goldwyn (Ford).*] 1 reel

Historic scenes and buildings of New England.

PICTOGRAPH. [*Goldwyn (Bray).*] 1 reel

Miscellaneous information, ending with a comedy cartoon.

TOY MAKING. [*Goldwyn* (*Ford*).] 1 reel

CIRCUS DAY. [*Famous Players-Lasky.*] 1 reel

A child comedy based on one of the great events of child life—a circus.

VII

THE LITTLEST SCOUT. [*Hallmark.*] 5 reels

A Boy Scout patriotic drama.

VIII

THE COST OF CARELESSNESS. [*Prizma.*] 1 reel

A forest fire.

SONS OF SALOOSKIN. [*Robertson-Cole.*] 1 reel

A deer hunt by an Indian tribe.

TAD'S SWIMMING HOLE. [*Community Motion Picture Service.*] 2 reels

The lesson of democracy and coöperation, taught by participation in one of boyhood's dearest delights.

IX

REBECCA OF SUNNYBROOK FARM. [*Famous Players-Lasky.*] Star: Mary Pickford. 5 reels

The story of that optimistic, lucky, unlucky, lovable child Rebecca.

X

THE BLUEBIRD. [*Famous Players-Lasky.*] 5 reels

Maeterlinck's drama of the quest for happiness is here beautifully screened.

10. Miscellaneous Programs

Art Museum

Cherry Blossom Time in Japan. [*Goldwyn (Ford).*] 1 reel

Japanese Fan Dance. [*Pathé Review No. 45, Pathé.*] 1 reel

Finest of Far Eastern Arts, Pictograph 6041. [*Famous (Bray).*] 1 reel

Some Speed to Suruga. [*Educational Films Corp. (Chester).*] 1 reel

Japanese landscapes.

The Story of the Willow Plate. [*New Era Films.*] 1 reel

Library

*Book and Magazine Making. [*Doubleday Page Co.*] Garden City, L. I., N. Y. 3 reels

*Americans in the Making. [*Bureau of Commercial Economics.*] 1 reel

Musical Program

*Making of Harp, Piano, and Pipe Organ. [*American Steel and Wire Co.*] New York City. 1 reel

Evolution of the Dance, Pictograph 6050. [*Famous (Bray).*] 1 reel

With the growth of this allied art, the development of music advanced.

Dance of the Vase (Greek). [*Pathé Review No. 49, Pathé.*] 1 reel

Parks and Playgrounds

News Weekly. 1 reel

The Only Way. [*Goldwyn (Ford).*] 1 reel

The lesson of Safety First.

A Day with John Burroughs. [*Prizma.*] 1 reel

The Making of an American. [*Atlas Educational Film Co.*] 1 reel

A story which depicts the need of understanding English, if one is to be a successful American.

Hotel

News Weekly. 1 reel

The City of Masks. [*Famous Players-Lasky.*] 5 reels

Who is your neighbor? Do we ever know each other? An innocent deception such as that depicted here gives rise to many surprises. A splendid story for a gathering of new friends.

Mutt and Jeff. [*Fox.*] 1 reel

General Recreation Programs

Homer Comes Home. [*Famous Players-Lasky.*] Star: Charles Ray. 5 reels

A comedy drama suitable for any audience.

The White Circle. [*Famous Players-Lasky.*] 5 reels

A Stevenson story produced by Maurice Tourneur.

The Third Generation. [*Robertson-Cole.*] 5 reels

An American story of honor, showing that a good name is a trust not to be disregarded.

FLAME OF THE DESERT. [*Goldwyn.*] 5 reels

Lou-Tellegen and Geraldine Farrar in one of the most artistic productions of the year.

THE SOUL OF YOUTH. [*Realart.*] 5 reels

A notable screen story, suitable for any audience.

PART IV
MECHANICAL AND LEGAL

CHAPTER XIV

EQUIPMENT AND INSTALLATION

THERE are three primary mechanical requirements for the installation of motion-picture service: viz, the projection machine; fireproof booth to house the machine; and the screen or surface on which the picture is projected. In addition, there are a number of secondary requirements, such as special electric wiring (not always necessary); darkening apparatus for windows; fire extinguisher; miscellaneous accessories, including film container for reels not in use; rewinders; cement for patching film; shipping labels for return of films; and a few simple tools for the adjustment of the machine.

Projection machines are of two general types, portable and non-portable. The former weighs from 20 to 50 pounds, and is usually incased in a box about suit-case size, lined with asbestos. In a sense, this is a machine and fireproof booth combined. It is efficient in small halls at distances up to 75 feet from the screen, projecting pictures up to 12 feet wide. It must be housed in a standard booth, the same as the large machines.

Non-portable projectors are very much larger; standing 5 to 6 feet high; are not inclosed; and

are made throughout of heavy metal parts for permanent installation. A description of various projectors will be found in Part IV, Chapter XVIII.

Both types of projectors are driven either by hand or by electric motor. About 75% of the machines produced today are motor driven. "The Motor Driven Machine," says F. H. Richardson in his standard work, the "Motion Picture Hand Book," "is an unquestioned blessing to the operator, though unfortunately it is a blessing which may very easily be and all too frequently is abused. The author has long since taken the position that there is only one proper place for the operator while the picture is being projected, and that is right beside his machine with his eyes on the screen every instant of the time. With the hand-driven machine he is compelled to stay there, and that is the chief advantage urged for the hand-drive. However, driving the projector by hand involves a very distinct hardship for the operator, particularly where there is only one employed.

"There is another objection to the motor, that is, as a general proposition the speed of a motor-driven projector can not or at least will not be regulated to suit the action in the picture as closely as it can and probably will be where a projector is hand driven. . . . This, however, is not or at least would not be a serious objection

if some scheme be devised to keep the operator at the machine, where he belongs, because with the more up-to-date motor-driven projectors it is possible to change speed quickly and with a fair degree of accuracy. . . . Almost every machine has a speed regulating device of its own." Most machines are equipped with a switch which must be held closed at all times by the operator. If he takes away his hand, a spring causes the switch to open, thereby shutting off the current, and stopping the machine. This compels him to remain at the machine while it is running.

For the non-theatrical exhibition, a motor-driven machine is by all means advisable. It insures uniform speed, permits the operator a little more freedom—at least with one hand—and, in general guarantees a smoother presentation than the hand-driven models provide. Nevertheless, it must be admitted that the motor adds from $50 to $100 to the expense of the projector. If cost is an important item—as it usually is in these cases—the hand drive will be the logical purchase. Later, when more funds are available, the motor can be added. An additional thought in this connection, is the fact that the motor consumes a certain amount of current which adds a definite, though small, amount to the cost of the electric current consumed.

Light for projection machines is provided by electric arc or incandescent bulb. The former is

necessary for long throw and large screens, as in the theatre; but the latter is best for shorter throws and small screens. Bulbs are almost invariably used in portable machines, while the arc is more common in the non-portable models. The large standard machines can be equipped with either bulb or arc, but the small projectors are limited to bulbs.

The non-theatrical exhibitor should use incandescent lamps where possible. They are simple to operate—requiring nothing more than turning a switch. He should be sure to have at least one lamp in reserve at all times, in case the one in use burns out. The maximum "throw" of a bulb is about 65 feet. Some manufacturers claim as much as 90 feet; but unbiased opinion agrees that a clear, bright picture can not be thrown beyond 65 feet with the present bulbs. Future development will probably produce bulbs of greater efficiency. The perfection of the gas-filled, high candle power bulb has made possible the suit-case machine. Arc lights can not be readily adapted to portable projectors.

When, by reason of the length of throw and size of picture required, an arc light must be used, the care and adjustment of the carbons are matters of extreme importance. Richardson says:

"A very slight difference in the set of the carbons may make a very large difference in screen illumination, particularly when using alternating current.

"Practically all illumination available for use comes from what is known as the crater. With direct current there is only one crater, but with alternating current there are two. The crater always forms on the positive carbon. . . .

"The light giving power depends upon (a) the temperature of the crater; (b) its area; (c) the character of the carbon.

"For the best results, the crater must be exactly in line with the optical axis (center) of the condensing lens. Inasmuch as all the light comes from the crater, it therefore follows that the more squarely the crater can be made to face the condensing lens, without causing the lower carbon tip to interfere too much in the light ray, the greater percentage of light will reach the lens, and be made available for projection."

It will be seen from the above that the use of the arc light presents difficulties of adjustment which make it unsuitable for the ordinary non-theatre equipment, especially when the operator is not experienced.

The electric current for a projector may be either alternating or direct. Resistance coils are necessary in either case. Direct current is most desirable because it permits a steadier light, especially when the arc light is used. Alternating current is likely to cause the carbons to buzz and makes the coils give forth a humming sound. The exhibitor rarely has a choice between alternating or direct current. He must take whatever the

city or local electric company provides—unless he makes his own current, and uses a battery.

Resistance coils are an extra item of expense, not included in the price of the large standard projectors—but almost invariably included in the suit-case models. It would be beyond the scope of this work to go into a technical discussion of rheostats, transformers, compensarcs and other types of resistance coils. Be it enough to say that your current must ordinarily be lowered in voltage before it enters the lamp house. Lighting circuits usually carry currents of 110 or 220 voltage; which must be reduced to the average voltage of about 48 for the projection arc. The average amperage requirements range from 25 to 50 on direct current, and from 40 to 60 on alternating current. The resistance coil will reduce your current to the proper voltage for the projector.

When ordering a machine, advise the manufacturer as to the voltage, if you have direct current; and, if alternating, give him the voltage, phase and cycle. This information will enable him to supply the proper resistance equipment with your machine.

Special wiring is not usually necessary for the portable machines with short throws. "Plug into any socket" is the slogan of the suit-case machine dealer; but it would be most unwise to follow his advice without consulting your electrician.

Whatever type of machine you may use, you should engage a competent electrician to install it. This is especially necessary for the large, standard machines, which require special wiring and often a special meter.

In this connection, it should be noted that most cities require that "Exit Lights" be placed over each door, showing the way out in case of fire. The wiring for such lights must be done by a licensed electrician, and can usually be done at the same time that the machine is being wired.

A fireproof booth is required in almost every state in America. To be sure Michigan exempts certain machines from necessity of having a booth; but this is an exception, negligible in comparison with nation-wide requirements. The legal and safety aspects of the booth are covered in Chapter XVI of this part. Our aim here is to state the essential requirements for a satisfactory booth, suitable for the non-theatre showing.

The ideal location of the booth, with regard to the screen, should be central, so that its floor will be three feet below the level of the screen. However, when there is a gallery, it is usually more convenient to place the booth up there. Considerable pitch, resulting from this location, does not seriously mar the picture.

A permanent booth may be constructed of hollow tile, concrete or brick. This construction has the great advantage of being sound proof. As-

bestos millboard on a substantial iron frame can be used; though it is not sound proof.

The Massachusetts law—which may be taken as typical of the law in most states—says: "The portable asbestos booth shall be at least 6 feet 6 inches in height by 5 feet square, and is designed for temporary use for one picture machine only. The frame shall be of standard pipe, angle ventilator trap and fittings, shall conform to the specifications herein set forth, and in each case shall be approved by the inspector. The four corner posts shall be of ¾ inch standard pipe, the eight horizontal members of ½ inch standard pipe, and the eight corner fittings of malleable iron or bronze casting with braced corners. The ventilator trap shall be made of 1 inch by 1 inch by ⅛ inch angles on all sides, shall extend the full width of the top and 2 inches beyond the front of the top pipe, shall be securely hinged 1 foot 10 inches from the front, and the corners shall be braced with ⅛ inch gusset plate bolted to each angle with 3/16 inch bolts.

"The sides shall be of plain commercially pure asbestos cloth weighing not less than two pounds to the square yard, which shall be in one piece, long enough to lap over not less than 2 feet where it comes together around the booth, and shall be not less than 7 feet 6 inches in width so as to lap on the floor; it shall be held in place by substantial metal hooks over the top pipe and with

snap catches or asbestos cord on the bottom pipe, such hooks, bottom catches or cord to be not more than 8 inches on centers. The top shall be covered with asbestos cloth of the same quality as the sides, which shall be of sufficient size to hang down on all sides at least 8 inches; it shall be provided with metal hooks or asbestos cord which shall hook or lace onto the pipe, to hold it in place. The floor shall be covered with an asbestos mat of the same material not less than 1 foot larger than the booth on all sides, and held in place when in use with heavy thumb tacks.

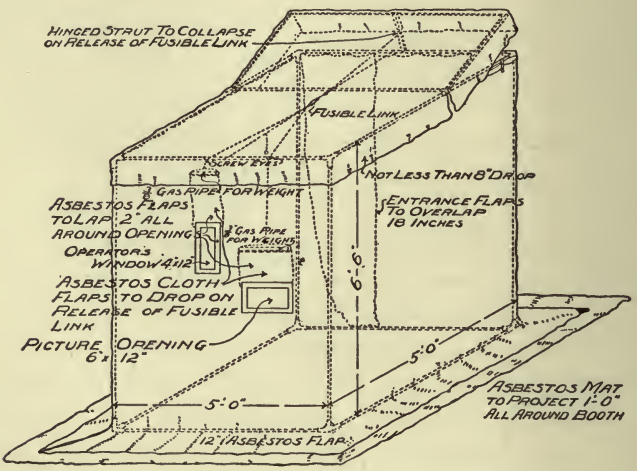
" The overlapping sides shall form the entrance and exit of the booth. All raw edges of asbestos shall be bound or hemmed at least 1 inch deep.

" The angle ventilator described above shall be so arranged that it may be raised at least 1 foot above the top pipe of the booth, and held by a toggle joint, or other approved device, whereby, in case of accident, it can be instantly dropped.

" The apertures, two in number, one for the machine not more than 6 inches in height by 12 inches in width, and one for the operator, not more than 12 inches in height and 6 inches in width, shall be provided, with shutters sewed to curtain at the top of opening, and the lower edges of the same shall be weighted with ⅜ inch gas pipe, which shall be long enough to go the whole horizontal length of the shutter, and provided with cord and fusible link, . . . running through a screw eye,

or a ring attached to the pipe frame over the openings. All shutters shall be of size to lap over curtain at least 1 and ½ inches on all sides."

The booth described above has the advantages of lightness, and portability. It can be easily constructed when a ready-made booth is not available.

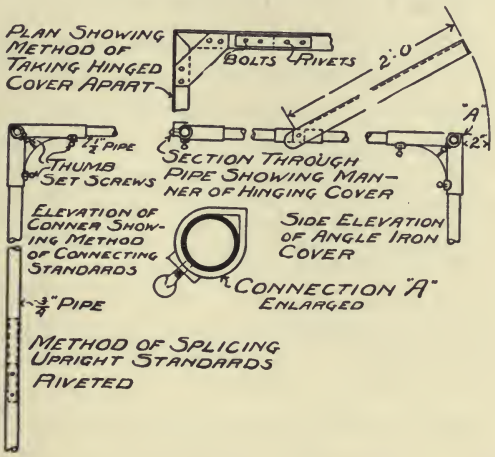

HINGED STRUT TO COLLAPSE ON RELEASE OF FUSIBLE LINK
FUSIBLE LINK
SCREW EYES
NOT LESS THAN 8" DROP
¾" GAS PIPE FOR WEIGHT
ASBESTOS FLAPS TO LAP 2" ALL AROUND OPENING
¾" GAS PIPE FOR WEIGHTS
ENTRANCE FLAPS TO OVERLAP 18 INCHES
OPERATOR'S WINDOW 4"x12"
6'-0"
ASBESTOS CLOTH FLAPS TO DROP ON RELEASE OF FUSIBLE LINK
PICTURE OPENING 6"x12"
5'-0"
5'-0"
ASBESTOS MAT TO PROJECT 1'-0" ALL AROUND BOOTH
12" ASBESTOS FLAP

ISOMETRICAL VIEW OF BOOTH

The accompanying cuts give a good visualization of it.

The booth must have a solid foundation. The least vibration in the floor will be greatly magnified in the image on the screen, marring the picture. Minute motion is magnified many, many times, and is, obviously, in proportion to the size of the picture.

Within the booth there should be sufficient incandescent lights to illuminate every corner brilliantly. The machine cannot be operated satisfactorily unless there is ample light. Have all the light the law allows. Massachusetts allows one for each machine, and one for the rewind table.



That means at least two in a booth having one machine.

Access should be easy, and preferably not directly into the hall. It should be reached by an inclosed stairway, so that, in case of fire, the operator can leave the booth without letting a cloud of smoke into the hall to alarm the audience.

The interior walls and ceiling should be painted with a very dark or black flat paint, without gloss.

This enables the operator better to see the shadows in his picture.

"All wires in the booth, except jumpers from the switch to rheostat, rheostat to lamp, and switch to lamp, shall be run in conduit with terminal bushings, junction boxes, outlet boxes and fuse boxes, with covers; all wire for machine lights to be not smaller than No. 6 for each arc, and if more than one arc, are to be rated for 40 amperes per arc, and size figured by the latest underwriter's code. All jumpers above mentioned shall be asbestos covered, stranded wire of size mentioned, and fitted with terminals. All wire conduits in the booth shall have porcelain outlets and junction boxes, with covers screwed on. All angles, and where the conduit enters the junction box, shall be fitted with bushings. None but cartridge type of fuse shall be used inside the booth, and of not over 45 amperes, unless by special permission of the inspector."—Mass. law.

The screen is the third primary factor in projecting a picture. Expert opinion differs somewhat as to the ideal screen material, but in view of the limitations as to expenditure, space and portability, common to most non-theatre installations, only two or three general considerations are important.

Where the screen can be permanently built into or on the wall, and does not have to be rolled up or removed, a metallic coated or highly reflective material is best. This gives a brilliant image, and is the type in use in most theatres. It is pos-

sible to stretch this screen on a rigid metal frame, and thus gain some degree of portability, if the frame is not too heavy.

When the screen is to be removed after each exhibition, it is advisable to use plain canvas, white, coated with kalsomine or other standard white coating material. Such a screen can be mounted on a roller, and rolled up after each exhibition; and, if necessary, taken down and removed.

Other types of patent white canvas screens have a flexible backing of rubber compound which permits the material to be folded up without wrinkling. This screen can be mounted with cords held at each corner, and is easiest to hang, and to remove.

If pictures are to be shown during the daytime, darkening apparatus is necessary at the windows. The ordinary shade does not keep out sufficient light to permit satisfactory projection. A strip of wood, painted black, projecting from the window frame, and parallel with the sash, about 3 inches, will probably prove satisfactory. If this does not eliminate the light, mount opaque, black cloth curtains on each side of the window, and operate them with a central draw-string. They will keep out every ray of light.

Equipment within the booth should include a rewind bench, with rewinders to wind the film back after it has been run through the projection machine. The bench is also important and use-

ful for inspecting the film; and making patches, or cutting out undesirable scenes. It should be made of two shelves of slate, or ⅞ inch boards painted with at least three coats of asbestos paint, and having a covering on top of asbestos wood or asbestos building lumber ¼ inch thick. It should be about 4 feet long and 1 foot wide. The upper shelf is used for rewinding and repairing films, and the lower shelf for storage of films. Rewind tables made of metal are on sale in the film-supply houses. They are provided with every detail to facilitate the repair and inspection of films, but they are hardly necessary for the non-theatre exhibitor. A shelf is enough.

A rewinder is a bracket on which the reel is held, and revolved. A system of gears enables the reel to be spun at a high rate of speed. Rewinders are usually hand driven, though there are motor-driven types on the market. Two rewinders are necessary—one to hold each reel. They are mounted at either end of the bench.

A simple set of tools, such as screw-driver, wrenches, scissors, pliers, etc., should be in every booth; together with an oil can full of good machine oil.

Shipping labels are necessary for the return of the film after showing. They are of two kinds, both of which are required. The first is an ordinary label, giving the address to which the film is to be sent, and the second is a "caution label,"

as described in Chapter XVI of this part. A small stock should be kept on hand, with cement for affixing them to metal cans.

A fire-extinguisher of the carbonic acid pattern is required. It must be kept in the booth, ready for instant use. A pail of sand and a pail of water should also be at hand.

For each reel a separate case made without solder should be provided. The cover must be tightly fitting, and the reels must be kept in the cases when not actually in the projection machine. Not more than 10,000 feet (ten reels) of film should be kept in the booth at any one time.

In general conclusion, we summarize the following procedure to be noted in installing a motion-picture projector:

1. Read the local rules and regulations governing the installing of projectors and films. You can obtain copies from your state authorities, city or county officials, and board of fire underwriters.
2. Decide where the pictures are to be shown.
3. Fix the place for the projector and screen.
4. Measure the distance from projector to screen.
5. Learn the character of your electric current. Consult your electric company on this point.
6. Secure the following permits:
   (*a*) From the building department, for installation.

(*b*) From the building department for wiring, (if necessary).

(*c*) From insurance company.

(*d*) License from police or fire department to operate machine (unless you are going to employ a licensed operator).

7. Buy your projection machine *after* you have the permits. At the same time buy the booth, screen, and miscellaneous equipment.

8. Engage licensed electrician to wire the machine booth and the hall (for exit lights when required).

9. Remember the fire extinguishers (water, sand, and hand-extinguisher).

SAFETY FIRST!

CHAPTER XV

OPERATION

It would be impractical to attempt in this, or any other volume, to teach the actual operation of a motion-picture projection machine. Observation and practice on a machine, under the tutelage of an experienced operator are the only satisfactory methods of learning. With the general theory of projection in mind, it is not difficult to learn to run the machine. The mechanical mind can grasp the matter fairly well in a few hours of intensive instruction. To become a finished operator, however, requires months. Three months' experience in Massachusetts entitles one to apply for a first-class license to operate machines. For non-theatre purposes, with the simple, portable projectors, or even with the large standard ones, it may be safely said that any man of average mechanical intelligence can learn to run the machine in one or two lessons. It does not follow that he will learn in that brief time to make repairs or difficult adjustments. That should be left to an expert at first. The purpose of this chapter will be to acquaint the prospective school or church exhibitor with the underlying mechanical principles.

Paradoxical as it may seem, a motion picture is in point of fact a still picture. Each picture rests on the screen for a fracton of a second. Sixteen pictures are projected each second. One-sixth of this time is consumed in the actual movement of the film, and during five-sixths of the time, the image is motionless on the screen. Motion pictures are, therefore, a blending of a succession of individual photographs into each other at the same rate of speed at which they were taken. The human eye can transmit to the brain only a limited number of distinct separate impressions per second, and beyond that number the impressions merge into each other so that the effect is that of continuity. This " Persistence of vision," as it is called, is what makes moving pictures possible.

The parts of a modern projector are grouped somewhat as follows: The base; the " head "; the shutter; the lamp house; the lenses, magazines and driving mechanism. The base supports the whole mechanism; the lamp house contains the lighting system—arc or incandescent lamp—the " head " is made up of the sprockets and intermittent movement which carries the film across the path of light; the magazines (2) contain the film; the shutter shuts off the light for a fraction of a second while the successive pictures move into place; the driving mechanism—hand or motor—keeps the machine in motion, and the lenses con-

dense and project the light through the film to the screen.

The path of the film begins in the feed reel. It unwinds from that reel at the rate of 60 feet per minute, and first passes through a pair of tightly pressed rollers as it leaves the magazine. The rollers act as a fire-trap or fire-valve. They literally " squeeze out " a fire from the film before it can reach the reel tightly inclosed in the magazine. The film then passes over a constantly revolving sprocket and a steady drum or film steadier to the film gate. In the film gate it is in the path of the powerful light. A twenty thousand candlepower beam passes through the film at this point. Here is where the film catches fire. Only the extreme rapidity with which it moves past this danger point saves it from igniting. Stop the machine and almost instantly a hole is burned in the film—or would be, were it not for an automatic shutter which drops down in front of the beam of light, cutting it off as soon as the machine slows down, or stops. The automatic shutter and the fire rollers practically eliminate danger of serious fire.

Before passing through the film, the light has been condensed, by a special lens, to the size of the " frame " or picture on the film.

From the film gate the film passes over the intermittent sprocket which pulls the film through the film gate at the rate of 16 jerks per second

(each jerk corresponding to a frame). It now passes through the lower steady feed sprocket, which is like the upper feed sprocket; and through the lower magazine fire rolls on to the take-up reel, which is the end of its journey. A free loop in the film is maintained above and below the film gate, to allow "play," and avoid tearing the film.

The purposes and operation of the intermittent sprocket and the shutter are perhaps the two most difficult parts to understand. However, if the fundamental theory of the motion picture is known, the necessity for these parts becomes obvious. It must be borne in mind that the motion picture is a series of still pictures, drawn in rapid succession through the path of light, and resting in that path for a fraction of a second. The intermittent sprocket translates constant movement of the film into regular jerks. On the sprocket are teeth which engage in the sprocket holes on both sides of the film and jerk the film down a definite distance, then disengage, only to re-engage in another pair of sprocket holes in time to draw down the next picture. The sprocket is a small shaft 1⅜ inches long and about ¼ inch in diameter, with sprocket wheel gears mounted at right-angles at each end. It is turned or actuated by either one of two mechanical devices: the Geneva Cross or the Cam and Cross Pin. The former type is probably the most commonly used. You

can see an example of the Geneva Cross in the escapement of your watch.

These movements shift the film with extreme rapidity, so as to allow the greatest possible time for the picture to remain stationary, and to reduce the amount of light required to the minimum. Furthermore, owing to the delicate constituency of the film, the jerk must start slowly, increase rapidly in speed, and then reach a gradual stop. This avoids breaking the film, or tearing the sprocket holes. Both types of intermittent movement obtain this result with about the same degree of success, and authorities differ as to the preferable type. It must be understood, however, that the intermittent is the heart and center of the projector. Upon the accuracy of construction, and the quality of the metal depends the success of the machine.

Synchronized with the intermittent gear is the shutter. Its purpose is to shut off the light from the screen during the time each individual picture moves down to make room for the next; and it turns on the light while the picture is projected on the screen. It is placed in front of the machine, between the projection lens and the screen. In appearance it resembles the cooling fan of an automobile, or a small electric fan, except that the blades of the shutter are flat—in the same plane —and are three in number.

If there were not a shutter on the machine,

the picture would appear with streaks of white light known as " travel ghost." It is due to the fact that as the picture slips down to make way for the next one, the impressions on the retina of the eye of any white object will persist in the eye in the form of the white streaks. The eye follows the white objects across the screen in preference to dark areas because the former make a stronger impression.

In theory the shutter should have only one large blade to cut off the light while the picture is in motion, and turn on the light while the picture is at rest. This theory is correct mathematically, but it is incorrect psychologically. The early motion pictures flickered badly because the mathematical theory was followed.

" For years," says Lescarboura, " pictures flickered, when suddenly projector designers gave mathematics a cruel blow. By multiplying the flickers they produced a zero effect. That is to say, they replaced the single-blade shutter by a two- or three-blade shutter. Or, in the case of a single-blade shutter, they geared it to make two revolutions for every film image, so that the light beam was cut off once while the film was moving and once while the image was held stationary. In the case of the two- and three-blade shutters the light was cut off while the film moved, and once or twice while the image was at rest. The result of increasing the flickers has been to cut

up the light interval so as to make a less marked contrast between the dark period, when the light is shut off entirely, and the light period when the image is being projected."

Having grasped the purpose and functioning of the intermittent sprocket and the shutter, the reader may now profitably consider the allied problems of light and lenses.

Lescarboura is singularly lucid on the question of light. He says:

"It is no simple matter to pass a large volume of light through such an opaque object as a film image, especially when the transmitted light is to be enlarged thousands of times on a distant screen. Indeed, tens of thousands of candle power must be used for the purpose, and the consumption of current is necessarily great.

"The most satisfactory light for motion picture projection has been the arc lamp, consisting of two carbon pencils between which plays an electric flame or arc of bluish white hue. The arc proper is due to the vapors of volatilized carbon or other materials forming the electrodes, which are slowly consumed by the action of the electric current. In order to form the arc, the electrodes must first be brought together, and then separated a short distance. The flame or arc when adjusted the proper length, is practically silent in the case of direct current, although it hums in the case of alternating current. If the arc is too short, it sputters or 'fries' and the light is unsatisfactory. When the proper arc has been struck, means must be taken to feed the carbons toward each other, since they are constantly consumed, tending

to lengthen the arc. If the carbons are not fed toward each other at regular intervals, the arc soon increases to such a length that the current can no longer bridge the gap, and the arc is extinguished.

"Various mechanical methods of feeding the arc are in use, the most common being a gear and ratchet arrangement . . . wherein the two carbons are fed toward each other so as to maintain the arc always opposite the center of the lens system. Other adjustments . . . shift the arc to the right or left, up or down, and forward or backward, so as to obtain the best projection."

The incandescent lamp, as stated in a previous chapter, is the other alternative to using the arc light. It has the advantage of extreme simplicity of operation and adjustment. It simply screws into a socket, like the ordinary electric-light bulb; and it is operated by turning a switch. The projection bulb differs from the common type in that it is filled with gas, usually has a larger base —"mogul base"—and is furnished in a variety of shapes to suit different machines. In addition to the advantage of simplicity, the high efficiency bulb gives steadier illumination than the arc, and consumes less current. Its limitation as to throw or intensity of light is the chief disadvantage.

When the light leaves the carbon arc or bulb filament it passes through a condensing lens, the purpose of which is to concentrate or condense the maximum amount of light on the bit of film in the film gate exposed to the rays. At this point

the image is created, upside down. This image strikes the objective or projection lens, which throws the picture, right side up, on the screen. In this objective lens unit are four individual lenses; two in the rear factor, and two in the front factor. They are mounted at each end of a metal cylinder. This cylinder is the projection unit which is moved backward or forward with respect to the screen to adjust the focus. An adjustment screw permits the lens to move far enough to obtain a perfect focus for any distance from the screen.

In ordering a machine it is necessary to specify the length of " throw "—that is, the distance from the machine to the screen. This information enables the manufacturer to equip the projector with the proper objective lens. A knowledge of optical projection is not necessary in order to operate a machine. It is enough to say that the lenses must be kept perfectly clean and highly polished at all times during projecton. A heavy loss of light results from soiled lenses.

The following table of lenses may prove helpful in determining the relation of lens to size of screen, and throw. Aperture opening $1\frac{1}{16}$ inch by $1\frac{5}{16}$ inch.

LENS FOCUS IN INCHES	Distance from Film to Screen											
	15 ft.	20 ft.	25 ft.	30 ft.	35 ft.	40 ft.	45 ft.	50 ft.	60 ft.	70 ft.	80 ft.	90 ft.	100 ft.
2	5.1	6.8	8.5	10.3	12.0	13.7	15.4	17.1	2.06	24.0	27.5	30.8	34.3
	7.0	9.3	11.6	14.0	16.4	18.7	21.1	23.4	29.4	32.7	37.4	42.1	46.8
2⅛	4.8	6.4	8.0	9.6	11.3	12.9	14.5	16.1	19.4	22.6	25.8	28.9	32.3
	6.5	8.7	11.0	13.2	15.4	17.6	19.8	22.0	26.4	30.8	35.2	39.3	44.0
2¼	4.5	6.1	7.6	9.1	10.6	12.2	13.7	15.2	18.3	21.3	24.4	27.2	30.5
	6.2	8.3	10.3	12.4	14.5	16.6	18.7	20.8	24.9	29.1	33.2	37.2	41.6
2½	4.1	5.4	6.8	8.2	9.6	10.9	12.3	13.7	16.4	19.2	22.0	24.5	27.4
	5.6	7.4	9.3	11.2	13.1	14.9	16.8	18.7	22.4	26.2	29.9	33.4	37.4
2¾	3.7	4.9	6.2	7.4	8.7	9.9	11.2	12.5	15.0	17.4	20.0	22.3	24.9
	5.0	6.7	8.4	10.2	11.9	13.6	15.3	17.0	20.4	23.8	27.2	30.4	34.0
3	3.4	4.5	5.7	6.8	8.0	9.1	10.3	11.4	13.7	16.0	18.3	20.4	22.9
	4.6	6.2	7.7	9.3	10.9	12.4	14.0	15.6	18.7	21.8	24.9	27.8	31.2
3¼	3.1	4.2	5.2	6.3	7.3	8.4	9.5	10.5	12.6	14.8	16.9	18.9	21.1
	4.3	5.7	7.1	8.6	10.0	11.5	12.9	14.4	17.2	20.1	23.0	25.7	28.8
3½	2.9	3.9	4.9	5.8	6.8	7.8	8.8	9.8	11.7	13.7	15.7	17.6	19.6
	4.1	5.3	6.6	8.0	9.3	10.6	12.0	13.3	16.0	18.7	21.4	24.0	26.7
3¾	2.7	3.6	4.5	5.4	6.4	7.3	8.2	9.1	11.0	12.8	14.6	16.4	18.3
	4.0	4.9	6.2	7.4	8.7	9.9	11.2	12.4	14.9	17.4	19.9	22.4	24.9
4	2.6	3.4	4.2	5.1	6.0	6.8	7.7	8.5	10.3	12.0	13.7	15.4	17.1
	3.8	4.6	5.8	7.0	8.1	9.3	10.5	11.6	14.0	16.3	18.7	21.0	23.4
4¼	2.4	3.2	4.0	4.8	5.6	6.4	7.2	8.0	9.6	11.3	12.9	14.5	16.1
	3.6	4.3	5.4	6.5	7.6	8.7	9.8	11.2	13.2	15.4	17.6	19.8	22.0
4½	2.2	3.0	3.8	4.5	5.3	6.2	6.8	7.7	9.1	10.6	12.2	13.7	15.4
	3.4	4.1	5.1	6.2	7.2	8.4	9.3	10.5	12.4	14.5	16.6	18.7	21.0
4¾	2.0	2.8	3.6	4.3	5.0	5.7	6.5	7.2	8.6	10.1	11.5	13.0	14.4
	3.2	3.9	4.9	5.8	6.8	7.8	9.2	9.8	11.8	13.7	15.7	17.7	19.7
5	1.9	2.6	3.4	4.1	4.8	5.4	6.1	6.8	8.2	9.6	10.9	12.3	13.7
	3.1	3.7	4.6	5.5	6.5	7.4	8.4	9.3	11.2	13.0	14.9	16.8	18.7
5¼	1.8	2.5	3.2	3.9	4.5	5.2	5.8	6.5	7.8	9.1	10.4	11.7	13.0
	2.9	3.5	4.4	5.3	6.2	6.9	8.0	8.8	10.6	12.4	14.2	16.0	17.8
5½	1.7	2.4	3.1	3.7	4.3	4.9	5.6	6.2	7.4	8.7	9.9	11.2	12.4
	2.8	3.3	4.2	5.0	5.9	6.7	7.6	8.4	10.2	11.9	13.6	15.3	17.0
5¾	1.6	2.3	2.9	3.5	4.1	4.7	5.3	5.9	7.1	8.3	9.5	10.7	11.9
	2.7	3.2	4.0	4.8	5.6	6.4	7.3	8.1	9.7	11.3	13.0	14.6	16.2
6	1.5	2.2	2.8	3.4	4.0	4.5	5.1	5.7	6.8	8.0	9.1	10.3	11.4
	2.6	3.1	3.8	4.6	5.4	6.2	7.0	7.7	9.3	10.9	12.4	14.0	15.6
6½							4.7	5.2	6.3	7.3	8.4	9.6	10.6
							6.4	7.1	8.6	10.0	11.4	13.0	14.5
7							4.4	4.9	5.8	6.8	7.8	8.8	9.8
							6.0	6.6	8.0	9.3	10.6	12.0	13.3
7½								4.5	5.4	6.4	7.3	8.2	9.1
								6.2	7.4	8.7	10.0	11.2	12.3
8									5.1	6.0	6.8	7.7	8.5
									7.0	8.1	9.3	10.5	11.6

Example: With a lens of 5½-inch focus at a distance of 35 ft. the screen image will be 4.3 x 5.9; at 40 ft., 4.9 x 6.7, at 45 ft., 5.6 x 7.6, etc.

If it is desired to figure the spread of ray, the following formula from Richardson's Handbook will be useful:

"It is easy to figure how much change in size of picture will be accomplished by moving the screen any given distance. Suppose you have a lens which projects a 10-foot picture at 60 feet. It is readily seen that if the width of the picture be divided by the number of feet it is projected the result will be the fraction of a foot its width increases with each foot of distance, hence in this case we have 10 divided by 60 equals 1/6 of a foot or 2 inches, which is the amount the light ray spreads for each foot of distance between the lens and screen. In proof of this multiply 2 times 60 and we have 120 inches, or 10 feet. Now if you move your screen back 5 feet farther, you will have 2 times 5 equals 10 inches additional width of picture, or if we brought the screen 6 feet nearer the lens, then we would have 2 times 6 equals 12 inches less width of picture."

A useful hint on improving the definition of a picture is also contained in Richardson's Handbook.

"The work of a projection lens which does not give a sharp definition may sometimes be improved by cutting a circle of stiff dark paper, just large enough to fit tightly into the lens barrel, and up against the front lens. In the center of this ring cut a circular opening the correct size of which must be determined by experiment in each individual case. Usually it is not advisable to stop down more than one-fourth the diameter of the opening. This

is often of benefit in sharpening the focus where the machine sets above or to one side of the screen, because reducing the lens diameter has the effect of increasing its depth."

By way of summary, the following essential points of operation must be understood and learned in order to put a good, steady picture on the screen:

1. Setting up the projector—eliminating vibration—wire connections.
2. Actual operation of the machine—threading—framing—focusing—adjusting tension of the film—definition—adjusting light for maximum efficiency.
3. Care of the machine—oiling—cleaning—replacing worn parts—adjustments.
4. Care of coils and wiring—blowouts—short-circuits—repairs.
5. What to do in case of fire.
6. Disposal of film and tools in booth—neatness—efficiency.
7. What to do when film breaks or burns.
8. Patching and trimming film.
9. Rewinding and inspection of film.
10. Shipping—required labels.

CHAPTER XVI

LEGAL ASPECTS—SAFETY REGULATIONS

THE handling, storage, exhibition and shipping of inflammable motion-picture films is surrounded by a number of legal requirements and limitations, most of which should be known and many of which must be known by the exhibitor. Most communities have similar ordinances on the subject; some of the laws are local or municipal, but, in general, the state law covers the matter. Michigan is an exception, being rather more lenient to the non-theatre user than are most states. The exceptions are not common enough to warrant special treatment in this work. In general, it may be said that the governmental authorities throughout the country are squarely against the showing of pictures under any conditions which jeopardize the safety of the audience through danger of fire. The prospective exhibitor should apply to his local fire or police commissioner for copies of local legislation before installing a machine using inflammable film.

Insurance regulations are also an important fac-

tor in the situation. Local and state laws may vary, but the insurance rules are more or less uniform throughout the United States. If the exhibitor does not comply with the insurance regulations he is likely to find that his insurance protection is withdrawn. In complying with the state law, he complies with the insurance rules at the same time, in most instances. Nevertheless it is advisable to consult with your insurance agent before using inflammable films. Local conditions sometimes cause the insurance companies to be even more stringent than the state law.

A third factor is the United States Government. Through its jurisdiction over interstate commerce, and through the Postoffice Department, the government makes certain regulations affecting almost every shipment of inflammable film. To be sure, shipments within a state, via private carrier, do not fall under U. S. jurisdiction. Such shipments can be made in non-regulation shipping cases, if the carrier will accept them. This exceptional condition is not important, and is rarely taken advantage of by film exchanges.

We will now consider the first of the three primary legal factors, viz., the state law. The Commonwealth of Massachusetts was one of the first states to enact legislation on motion pictures. From time to time this law has been revised and kept up to date. It may therefore be considered a fair example of the average state legislation

throughout the country. For this reason we submit the act in toto.

LAWS
RELATING TO THE
EXHIBITION OF MOVING PICTURES

Acts of 1914, Chapter 791.

An Act relative to the *Operation* of the Cinematograph and to the Exhibition of Motion Pictures.

SECTION 1. No cinematograph, or similar apparatus, involving the use of a combustible film more than ten inches in length, shall be kept or used for the purpose of exhibiting such films in or upon the premises of a public building, public or private institution, schoolhouse, church, theatre, special hall, public hall, miscellaneous hall, place of assemblage, or place of public resort, until such cinematograph or similar apparatus has been inspected and approved by an inspector of the building inspection department of the district police, who shall have placed thereon a numbered metal tag; nor until a booth, or enclosure, which has been inspected and approved by such an inspector and his certificate issued therefor, has been provided for said apparatus; nor until such precautions against fire as the chief of the district police may specify have been taken by the owner, user or exhibitor therefor: *provided, however,* that no such cinematograph or similar apparatus shall be operated with oxyhydrogen gas, so-called, or with limelight. In addition, in the city of Boston, the location of any booth or enclosure surrounding said apparatus, shall be approved by the building commissioner, who may order such additional precautions against fire as he may deem necessary.

SECTION 2. The inspectors of the building inspection department of the district police are hereby empowered and directed to inspect any cinematograph or similar apparatus involving the use of a combustible film more than ten inches in length, which is to be kept or used in or upon any of the premises defined in section one of this act; and also to inspect any booth or enclosure provided for the same; and the chief of the district police shall make such rules and regulations as he may deem necessary for the safe use thereof.

SECTION 3. For the inspection of a cinematograph or similar apparatus, or for the inspection of a booth or enclosure, as provided by section one of this act, a fee of two dollars shall be paid by the owner or user thereof.

SECTION 4. Except as provided for in section six of this act, no person shall exhibit or operate any cinematograph or similar apparatus involving the use of a combustible film more than ten inches in length, in or upon any of the premises defined in section one of this act, until he has received a special or first-class license so to do from an inspector of the building inspection department of the district police. No such license shall be granted until the applicant has passed an examination proving him to be thoroughly skilled in the working of the mechanical and electrical apparatus or devices used in, or connected with, the operation of a cinematograph or similar apparatus, as hereinbefore defined, and no person under twenty-one years of age shall be eligible for such examination. The fee for the examination shall be three dollars and shall accompany the application for license. The first-class license shall be for the term of one year from the date thereof, but may be renewed yearly without examination, by an inspector of the building inspection department of

the district police, upon the payment of a fee of one dollar.

SECTION 5. Any person eighteen years of age or over, desiring to act as an assistant to a holder of a special or first-class license, shall register his name, age and address on a form furnished for the purpose by the chief of the district police; and, upon the payment of a fee of one dollar, the said chief may issue a permit allowing such person to assist such a licensed operator in a booth or enclosure; but such person shall not himself operate the cinematograph or similar apparatus. The permit shall be for the term of one year from the date thereof, but may be renewed yearly by the chief of the district police upon the payment of a fee of fifty cents.

SECTION 6. A second-class license giving the right to operate a hand-driven cinematograph or similar apparatus, but only in the presence of a holder of a special or first-class license, may be granted to any person who is not less than twenty years of age and who has been employed for three months as an assistant under the supervision of a licensee or licensees in or upon any of the premises defined in section one of this act. The applicant, as a condition of receiving the said second-class license, shall pass an examination satisfactory to an inspector of the building inspection department of the district police, and shall present to the chief of the district police an affidavit signed and sworn to by him, stating that he has so worked for said period. The chief of the district police may require that the affidavit be corroborated. The fee for the examination shall be two dollars and shall accompany the application for license. The license shall be for the term of one year from the date thereof, but may be renewed yearly by an inspector of the building inspection

department of the district police upon the payment of a fee of fifty cents.

SECTION 7. Any person over twenty-one years of age who has held a second-class license for three months or more and has worked regularly during that period in a booth or enclosure in or upon any of the premises defined in section one of this act, may receive a license of the first class upon presenting to the chief of the district police an affidavit signed and sworn to by him stating that he has so worked for the said period and upon passing the examination and payment of the fee as provided for in section four of this act.

SECTION 8. Any person who has operated a cinematograph or similar apparatus under a license issued by the district police under any preceding act and any person over twenty-one years of age who presents to the chief of the district police an affidavit signed and sworn to by him stating that he has operated a cinematograph or similar apparatus in a booth or enclosure, in a theatre or hall devoted to public exhibitions of moving pictures outside the commonwealth for a period of three months or more shall be eligible for the examination for a special or a first-class license as provided in sections four and ten of this act.

SECTION 9. A first-class license shall apply only to the operation of a hand-driven cinematograph or similar apparatus.

SECTION 10. The holder of a first-class license as defined in this act, or any person designated in section eight of this act who passes an examination satisfactory to the district police, may be granted a special license to operate by hand or by motor any cinematograph or similar apparatus which has been inspected and tagged by the district

police. The fee for the examination shall be three dollars and shall accompany the application for a license. The license shall be for the term of one year from the date thereof, but may be renewed yearly by an inspector of the building inspection department of the district police upon the payment of a fee of one dollar.

SECTION 11. An operator's license or an assistant's permit issued under this act may be suspended or revoked for cause at any time by an inspector of the building inspection department of the district police, but the person whose license or permit is so suspended or revoked may appeal to the chief of the district police, whose decision in the matter shall be final.

SECTION 12. Except in the city of Boston, the chief of the district police may grant permits for the special exhibition of pictures by the use of a cinematograph or similar apparatus in or upon any of the premises defined in section one of this act, which, in his opinion, are in safe condition for such exhibitions, and he may prescribe such regulations as he may deem necessary for the presentation of the same. A fee of two dollars shall accompany the application for each permit.

SECTION 13. The provisions of sections one to five, inclusive, of this act shall not apply to any cinematograph or similar apparatus operated with only cellulose acetate films not more than one inch and one-fourth in width and requiring not more than five hundred watts of electric current to operate the arc: *provided, however,* that such machines shall not be kept or used in or upon any of the premises defined in section one of this act except under such regulations as the chief of the district police shall prescribe.

SECTION 14. This act shall not apply to licenses or

special licenses to operate cinematographs or similar apparatus issued by the district police and now in force, but upon the expiration of any such licenses the holder of a special license shall be entitled to a special license under this act upon the payment of the renewal fee as provided for in section ten, and the holder of a license shall be entitled to a first-class license under this act upon the payment of the renewal fee as provided in section four of this act.

SECTION 15. Any person, firm, corporation or association of persons, keeping or using a cinematograph or similar apparatus contrary to the provisions hereof, or in violation of any rule or regulation made by the chief of the district police, or, in the city of Boston, in violation of any regulation or requirement made by the building commissioner in accordance with the provisions hereof, shall be punished by a fine of not less than fifty nor more than five hundred dollars.

SECTION 16. Chapters five hundred and sixty-five and five hundred and sixty-six of the acts of the year nineteen hundred and eight; chapter two hundred and eighty-one of the acts of the year nineteen hundred and nine; chapters forty-eight and four hundred and forty of the acts of the year nineteen hundred and eleven; chapter one hundred and eighty-two of the acts of the year nineteen hundred and twelve and all acts and parts of acts inconsistent herewith are hereby repealed.

SECTION 17. Notwithstanding any of the provisions of this act, the chief of the district police may grant special licenses for operators of moving pictures in churches, schoolhouses, or public institutions in the cities and towns of the commonwealth, except Boston, which, in his opinion, are in safe condition for said exhibitions, and he may

prescribe regulations for the proper conduct of the same. A fee of two dollars shall accompany each application for such special license. [*Approved July* 7, 1914.

Acts of 1913, Chapter 280.

An Act to authorize the Mayor of the City of Boston to grant Permits for Special Moving Picture Exhibitions in Churches, Halls or Other Buildings.

SECTION 1. The mayor of the city of Boston may grant permits in writing for special exhibitions of moving pictures in churches, halls or other buildings in that city which, in his opinion, are in safe condition for such exhibitions, and he may prescribe regulations for the proper conduct of the same: *provided, however,* that such special exhibitions shall be subject to the laws of the commonwealth and the regulations of the district police relating to the use of the cinematograph or similar apparatus.

SECTION 2. A fee of two dollars shall accompany each application for a permit hereunder.

SECTION 3. This act shall take effect upon its passage. [*Approved March* 12, 1913.

General Acts of 1915, Chapter 169.

An Act relative to Cinematographs using only Cellulose Acetate Films.

SECTION 1. The provisions of chapter seven hundred and ninety-one of the acts of the year nineteen hundred and fourteen shall not apply to any cinematograph or similar apparatus operated with only cellulose acetate films not more than one inch and one-fourth in width and using only an enclosed incandescent lamp.

SECTION 2. This act shall take effect upon its passage. [*Approved April* 16, 1915.

The last act definitely permits the use of cellulose acetate (slow-burning) films without booth or other restriction, *provided* such film is not more than 1¼ inch in width, and used only on a machine with enclosed incandescent lamp. The question naturally arises: "Why limit the width to sub-standard size?" "Why not exempt *all* machines—standard or sub-standard—provided they use slow-burning film?" (Standard size is 1⅜ inches.)

The answer is simple. The exhibitor might *promise* to use only slow-burning film, but the temptation to substitute inflammable film for the other would be too great for the average man to resist. The only way to avoid the risk is to make it impossible to take it.

Insurance regulations—the second factor—are automatically complied with in obeying the state fire laws in most cases.

The third factor—United States Government—has a number of important aspects. Perhaps the most important is the series of Postal Mailing Regulations. As films are frequently shipped by Parcel Post, the exhibitor should be familiar with the regulations.

Postal Mailing Regulations—Postmasters are hereby directed to accept motion-picture films for

transmission in the mails outside of mail bags when packed and labeled in conformity with the Interstate Commerce Commission regulations, as follows:

> Rule 43—
>
> (a) Moving-picture films must be packed in tightly-closed metal cases inclosed in a strong, spark-proof wooden box; or in spark-proof cases made of sheet iron not less than 0.02 inch thick (No. 25 U. S. standard gauge) and lined throughout with fiber board at least ⅛ thick, or some other equivalent insulating material. The covers of these cases must fit tightly and must lap over the body at least ⅝ inch on the sides, forming a tight joint.

All packages containing motion-picture films must have attached thereto by the shipper a diamond-shaped yellow label, each side four inches long, with the wording printed in black letters inside of a black-line border measuring 3½ inches on each side. (See next page.)

All such packages must be placed in cars and offices in positions that will permit of their ready removal in case of fire. They must not be loaded in cars nor stored in stations or offices in contact with steam pipes or other sources of heat.

These instructions do not apply to motion-picture films made of cellulose acetate, which are now mailable.

This order to be effective January 1, 1917.

The Interstate Commerce Commission prescribes the kind of metal shipping case to be used. In view of the fact that the exhibitor is sometimes

NOTICE
TO
Postal Employees
CAUTION
Keep Fire and Lights Away
Sweep Up and Remove Carefully Contents of Broken Packages
This is to certify that the above articles are properly described by name and are packed and marked and are in proper condition for transportation, according to the regulations prescribed by the Interstate Commerce Commission
Shipper's Name
Shipper's Name

tempted to use an improvised, non-regulation, shipping container, we believe that the following Interstate Commerce requirements should be known by him.

METAL CASES OR CANS FOR OUTSIDE CONTAINERS FOR INFLAMMABLE MOTION-PICTURE FILMS

(Effective September 30, 1918)

1. Cans or cases must be made of sheet iron not less than 0.02 inch thick. These cans or cases must be lined throughout with hard fiber board at least one-eighth inch thick, or with some other equivalent insulating material approved for this purpose by the Bureau of Explosives.

2. Covers, if hinged, must be permanently attached to metal cases or cans by not less than two hinges which must be securely riveted, or they must be slip covers, closely fitting. The covers must be lined with insulating material of the same character and thickness as required for the body of the container.

3. Hinged covers must fit tightly against the shoulder of the body, and lap over or inside the body not less than seven-eighths inch on all sides. A strong metal hasp must fit over staple or eyebolt, and must be provided with a permanently attached catch to engage in staple or eyebolt.

4. Telescopic slip covers must fit tightly against the shoulder of the body and lap down over or inside the body not less than 3 inches (except that for a one-reel box the lap may be 2 inches). Telescope or slip covers must be secured to cans or cases by a strong, positive, mechanical device, made of metal. This device must be approved by the Bureau of Explosives both as to design and construction.

5. Each outside metal case or can must be plainly and

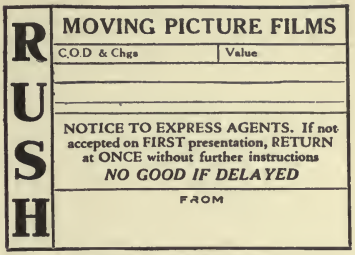
permanently marked "Complies with I. C. C. Specification No. 32," or if desired, this marking may be indicated by a symbol consisting of a rectangle as follows:

I. C. C.-32.

The letters and figures in this symbol must be at least one-half inch high. The symbol shall be understood to certify that the package complies with all the requirements of this specification.

In most instances, the above regulations have been complied with before the films reach the exhibitor, otherwise they would not have been accepted for shipment at the starting point.

Reshipment, or return of films, demands merely that they be replaced in the case, and that the case be labeled with a return label, and a caution label, both of which are usually supplied by the exchange. They accompany the reels, in the shipping case. Be sure to look for them when opening it. Sometimes the shipper has forgotten to put them in. For this reason it is important to have on hand a stock of blank return and caution labels. The following combination of the two, gummed, and padded, can be purchased in most motion-picture supply houses for 50c a book of 100.


RUSH
MOVING PICTURE FILMS
C.O.D & Chgs
Value
NOTICE TO EXPRESS AGENTS. If not accepted on FIRST presentation, RETURN at ONCE without further instructions
NO GOOD IF DELAYED
FROM

ACTUAL SIZE 4X10 IN.

Despite the numerous regulations surrounding the use of inflammable film, it must not be assumed that such use constitutes an extraordinary fire risk. As a matter of fact *serious* film fires are most uncommon. The modern projection machine is almost absolutely safe. It has enough safety appliances to eliminate practically all possibility of fire within the machine. Circular 75, United States Bureau of Standards, says:

"Motion-picture films have the same general composition as the materials mentioned above, celluloid and similar materials, and municipalities have drawn up elaborate specifications to regulate their use so as to minimize the fire hazard. It is not to be understood that, with reasonable care, celluloid and similar materials constitute an unusual source of danger. They are not to be condemned by the public any more than would be petroleum or any other hazardous material, but it is desirable that their highly inflammable nature be known, that they may be handled with care when used about the house or person."

The National Fire Protection Association published (Quarterly Bulletin, January, 1918, Vol. 11, No. 3, p. 292.) these interesting figures on the common causes of motion-picture fires.

Classification.	*Number of fires.*	*Per cent of common causes.*
Heating	2	4.8
Lighting	12	28.5
Boiler (or fuel)	1	2.4
Smoking	22	52.4
Lighting	1	2.4
Rubbish (or sweepings)	1	2.4
Miscellaneous	3	7.1
Total	42	100.0

The fact that over one-half the fires due to common causes were the result of careless smoking speaks for itself.

To prevent fire, never remove the film from the metal container in a room containing combustible materials or an open flame, fireplace, cigar, cigarette, etc. Never place the film or container on or near a radiator or heater; keep all film, excepting the reel in use, in the metal can at all times.

The ultimate solution of the fire problem is legislation by the United States Government requiring that *all film* in use in the United States be acetate cellulose—slow burning. This would eliminate at one stroke all danger of fire, and, incidentally, would bring about numerous economies

in the shipping, storage and showing of pictures. The physical handling of inflammable film, at every point, is expensive. Exchanges must be housed in strictly fireproof buildings, specially constructed. Within these buildings there must be fireproof vaults in which the film is kept. Only a limited number of reels may be stored in any one vault. The vaults must be equipped with sprinklers, ventilators, and other safeguards. All this makes for expense which slow-burning film would avoid.

Nevertheless, the difficulties of passing a national safety law are so numerous and so great that there seems little hope of it being accomplished for years to come. Indeed, we fear that only a horrible fire, in which many lives are lost, would arouse the country and Congress to call for non-flam film throughout the United States.

Local ordinances already give fair protection to the public. Film men feel that they would lose more than they would gain by the law because of the increased expense of manufacture of cellulose acetate as compared with the nitrate product. Any economies effected in handling expense would be counterbalanced by the increased costs. Theatres do not consider the fireproof booth requirement burdensome because it is necessary anyway to keep the noise of the machines from the audience. Exchanges are already equipped to handle inflammable film; and they are numerous enough to

provide storage space for all films required by theatres for some time to come. There are, in fact, too many exchanges at present. For this reason the exchange man is not particularly interested in the proposed law.

Finally, there is a general feeling in the industry that acetate film is less satisfactory than nitrate film. It is believed to be shorter lived—being more brittle than the nitrate product. Furthermore, the average motion-picture man will swear that acetate cellulose is less transparent than nitrate, and, therefore, does not throw as bright a picture with the same amount of light. The correctness of the latter opinion is open to question. Our own experiments indicate that the average observer can not distinguish between the results of nitrate or acetate film projection on the screen. Current opinion, however, is against the acetate, and it would probably block progress of the Act through Congress. Nevertheless, we firmly believe that the motion picture will never reach its maximum utility until a national non-flam law removes the many legal restrictions now in force.

In addition to the laws quoted in this chapter, relating to operation of projection machines, there are laws in every state, intended primarily to control theatrical exhibitions of pictures. They prescribe license fees, censorship regulations, conduct of the theatre, and many other things, of no spe-

cial concern to the non-theatrical exhibitor. We have presented, we believe, the important legal aspects of motion-picture presentation necessary to guide the school-man or church-man in operating his showings.

CHAPTER XVII

SAFETY PROJECTORS *vs.* STANDARD

THE non-theatrical exhibitor should understand clearly that there are two courses open to him in planning his installation. He can install a standard tread machine, using inflammable film; or he can install a narrow-tread projector, using non-inflammable film. There are definite advantages as well as disadvantages to either course of action.

In the first place the standard projector imposes numerous mechanical and safety requirements such as the portable or permanent booth, special wiring, and all of the other problems enumerated in previous chapters.

The narrow-tread machine using non-flam film is entirely free from local safety regulations. Used with non-inflammable film, it can be operated at will in the schoolroom, the Sunday School, the home, or the factory. No licensed operator is required; nor booth, nor special film containers; special wiring; exit lights, etc. It is *safe* for use under any conditions. Despite these striking advantages, there are disadvantages. The prospective purchaser of a machine will find it difficult to hear both sides of the matter. If he chance

first on a standard machine salesman, he will hear scornful utterances regarding narrow-tread projectors. The standard-tread man hates the narrow-tread, safety proposition. On the other hand, the narrow-tread man waves gleefully at the standard-tread man a bundle of fire laws surrounding the latter's machine. He emphasizes the limitations on inflammable film, and endeavors to frighten the purchaser away from it. The following articles, which appeared in the *Educational Film Magazine* for May, 1920, give some arguments pro and con:

FOR THE STANDARD MACHINE WITH INFLAMMABLE FILMS

By C. Francis Jenkins
President, Graphoscope Company, Washington, D. C.

The motion picture is only just beginning actively its most useful form, i. e., an instrument for teaching, and it is altogether too valuable a medium to be hampered by antique restrictions which were never made for the new use and new conditions.

Authorities are not a unit on the degree of danger involved in the use and storage of nitrate of cellulose film. The Bureau of Standards, in bulletin 75, cautions the general public against panicky contemplation of motion picture film, explaining that it is the same substance "as the toilet articles on your dresser" and "less dangerous than kerosene."

The Post Office Department strictly refuses to accept

dangerous substances for transportation in mail cars, but apparently does not consider motion picture film an extra hazard, for it handles about five hundred tons of it daily, and without mishap.

Every photo supply shop carries quantities of this same celluloid film, made for use in hand cameras, and no raise in insurance rates was ever made because of it.

Nitrate of cellulose motion picture film is not "highly inflammable," in the same sense that widely-used gasoline is, for example. It is not volatile, which is greatly in its favor. It will ignite easily and burn very rapidly when lying in a loose pile just as pine shavings will. Film is, however, differently constituted chemically, and not so easily extinguished by smothering, because it has sufficient oxygen within itself to support slow combustion. Burning film is more readily extinguished by chilling, as with large volumes of water, or with chemicals, tetrachloride, for example. Motion picture film in its usual tightly rolled form cannot readily be ignited with a match; the match almost invariably burns itself out before the film will blaze. Tightly rolled film is rather difficult to fire; therefore, all film should be handled in this form and kept so, in metal cans or similar containers.

Motion picture film is more or less new to the majority and its peculiar composition and characteristics should be better known in order that the hazard may be minimized. Some hazard there is as there is with anything else, even walking across the street. But as to preventing or seriously hampering its wide use as a means of imparting all kinds of information—well, it simply can't be done, the picture is too widely useful.

Another point may be wisely introduced here, I think —the question of the invalidation of insurance policies by

the use of picture machines. The courts have repeatedly held, until it is now established law, that the presence of an extra hazardous substance in a burning building does not invalidate insurance thereon, unless it was the cause of the fire. The recent burning of a boys' school in Baltimore is a case in point. The building caught fire from a tinner's torch on the roof. The insurance was paid though a boothless motion picture machine had been in use in the school for two or three years.

Now as to the desirability of a booth, let me say that in no other human employment involving hazard is it contended that concealing the operator tends to added safety, makes him more careful. "More light on the subject" is always a good slogan. We illuminate dangerous places so that we may minimize the danger. We keep tab on the railroad engineer by a system of block signals. Why, we don't trust a paid watchman, for we put a clock to watching the watchman. But when it comes to the picture projection risk, we require the operator to work concealed on the assumption that he will be more careful and more diligent in keeping the film off the floor and in its metal container and that he will not smoke if he works unseen, even though he may be a cigarette fiend. The concealing booth is an anomaly, a reversal of time-honored safety practice.

May I cite the report of the National Fire Protection Association, in the January, 1918 bulletin, that "more than fifty per cent of the known common causes of film fires is smoking in the booth"; and in discussing the question of a booth says that certainly such a device "which serves only to conceal the operator is an unmixed evil."

From the best data available there are in use already

about two and a quarter times as many picture projectors outside as inside of booths, and yet the only fires the proponents of a booth have ever cited were booth fires, perhaps because there have never been any non-booth picture projection fires.

It is well known that during the war, motion pictures were used in cantonments, training camps, schools, public buildings, aboard transports, etc., and without booths by official written permission of the War Department, provided only that incandescent lamp machines were employed, and the judgment of the department was justified by the subsequent record. Even the George Washington had four such machines aboard when she carried the President to and from France.

Nor do I admit that narrow-width, odd perforation, or other freak film, tends toward safety, but rather to danger, for if ever there are enough of these machines in use to make it profitable, film for use thereon will be made in "inflammable" stock rather than "non-flam" for the same reason that governs elsewhere in business, i. e., it is cheaper. A very serious condition would then arise, for lulled to less caution by a false sense of security by the machine manufacturer's statement that only "safety" film can possibly be used on his machine, the user is less cautious than he would otherwise be if he knew that only one kind of film existed and that he should exercise caution accordingly.

No greater harm could come to the educator than the introduction of two standards of picture film. In this many prominent men agree. Here's what a few of them have said:

"The use of differing width (of film) seems to me little less than a calamity. Experience has developed a standard, and

variation from it results only in confusion. Insistent demand everywhere for safe film will force the use of proper stock and will obviate the inconvenience now due to local protective demands."—Frederick Starr, University of Chicago.

"The present size of film is standard the world over. It would be folly to change it, and I do not think it within the power of any man to do it."—Thos. A. Edison.

"I can see no real excuse and no necessity for the narrow width, off-standard film. The adoption of narrow width film for one purpose and a standard width for another, seems to me to be as sensible as was the reasoning of the notorious individual who cut a hole in his door for the cat and a second one for the kitten."—Chas. Roach, Visual Instn. Service, Iowa State College.

"The introduction of two sizes of film for educational work is exceedingly undesirable and is decidedly unfair and embarrassing to educational institutions. The double standard is seriously curtailing the use of motion pictures in schools."—Don Carlos Ellis, Motion Picture Activities, Dept. of Agriculture.

There are millions of feet of film on standard stock. Travelers, globe trotters, lecturers, all find their work greatly facilitated by the single standard of cameras and projectors the world over. All United States Bureau of Education film (free to educators) is on standard stock, as is all other federal, state and municipal film, including the 34,000,000 feet war history pictures mentioned in your article, and all of this is available for instruction purposes to those institutions equipped with standard film projectors. Nor should one forget that the theatres are daily receiving and showing more and more educational film which is also being rented for school use.

Dr. Starr points out the logical line of advance when he urges insistent demand for acetate of cellulose (safe) film instead of nitrate film. If it is good for safety standard film, it is equally desirable that all film be made on this stock. This is a subject, by the by, on which the Society of Motion Picture Engineers voted unanimously in passing the following resolution:

"To the United States Government Departments and Bureaus, State Departments and Municipal Governments—

"It is the opinion of the Society of Motion Picture Engineers that in the interest of public safety all motion picture films issued in future by the Federal Government, State or Municipal Departments, shall be printed on slow-burning stock and that all film so printed should be so labeled; first, for the purpose of securing safe conditions in the use of these films; and, secondly, to give by this means an example which should be followed as far as practicable by all manufacturers and distributors of motion picture film."

"The motion picture is already the fifth largest industry. It is destined ultimately to be the greatest single industry in the whole world and the most useful. It speaks the one universal language, to the old and the young, and the learned and illiterate of every tongue. Prof. Elliott, I think it was, said that the theatre use of pictures will be but seven per cent of the total ultimate use of the motion picture just as fiction is but seven per cent of literature. The non-theatre use of pictures is, therefore, worthy of our best effort if only because of its future."

IN FAVOR OF SAFETY STANDARD FILM AND PROJECTORS

By A. F. Victor

President, Victor Safety Film Corporation, Chicago, Ill.

(*A letter to the Editor*)

I have carefully gone over the manuscript which you sent for my inspection and thank you for your invitation to reply to the arguments advanced by the two authors.

In the case of Mr. Jenkins' article, however, we are confronted by an entirely different element. This article is exceedingly clever and I pay high tribute to the writer's ability to present in a plausible way that which is entirely erroneous and to give a semblance of plausibility to a faulty theory.

Your stand is the advocacy of fireproof booths with standard film or the use of Safety Standard if booths are omitted. Mr. Jenkins' article is directly advocating the use of inflammable film without the use of booth. It minimizes the danger connected with the use of inflammable film. It quotes several people's opinions, opinions which were formed on the basis of an original misinformation. I have seen some of the letters which preceded some of the letters quoted at the end of Mr. Jenkins' article and these letters were couched in terms which did not give all of the information which should have been furnished if an unbiased opinion had been expected. For your information I will show you wherein Mr. Jenkins misrepresents or evades the truth.

Mr. Jenkins states that he may speak with authority, "being the creator of the type of projector used everywhere the world over." There is no authentic evidence to back Mr. Jenkins' claim and an examination of the records of the United States Patent Office proves the contrary.

In paragraph four he states that the Bureau of Standards cautions the general public but fails to give the balance of Bulletin 75 referring to the precautions which should be taken. As a matter of fact, the very fact that the Bureau of Standards, does warn the public against the "panicky contemplation" shows that there have been reasons for such a warning.

During the recent influenza epidemic people were also warned against "panicky contemplations" but such a warning did not in any way alter the fact that the influenza epidemic killed thousands of people and called for every possible precaution.

In paragraph five Mr. Jenkins states that the Post-Office Department handles about 500 tons of inflammable film daily and without mishap. The reader, however, is not told that this lack of mishap is due to the fact that special fireproof containers of prescribed thickness of material must be employed and that every can containing film must have the following label printed on yellow paper: "Notice to railway employes. CAUTION. Keep away from Fire, Stoves, Radiators, Lighted Matches, Lanterns and Direct Sunlight. Any Leaking packages must be removed to a safe place. Shipper has certified on his Shipping Order to compliance with all regulations that apply to this package."

In paragraph six he compares the use of motion picture film to film used in hand cameras, etc. The hand cameras use film in small quantities and do not use film in connection with a high power illuminant, concentrating a very hot beam of light on the film itself.

In paragraph seven Mr. Jenkins states that nitro cellulose motion picture film is not highly inflammable. He says further that it will ignite easily and burn very rapidly, etc., just as pine shavings will. There is, however, a rule preventing people from accumulating pine shavings in an open room. In fact, we have at our factory, an inspector who makes it his business to examine our basement at regular intervals and calls our attention to any non-observance of the rule, which prohibits the accumulation of such material.

He states that film has sufficient oxygen in itself to support slow combustion. I wonder what Mr. Jenkins considers slow combustion, since a reel of film will burn in 45 seconds; an actual test made by myself to determine the time necessary during which a reel of film can be consumed by fire. He states that tightly rolled film is rather difficult to fire; therefore, all film should be handled in this form and be kept in metal cans or similar containers. Yet he claims that this film can be used safely in an open room and handled out of such containers while being inserted and taken out of the projecting machine.

In paragraph eight he states that the laws which now control the use of motion pictures were formulated during the early part of the motion picture industry. This is not so. In the beginning of this industry there were no laws and I myself operated a number of store shows, the forerunners of the present motion picture theatres, and used film absolutely without booth, magazines or other now proven necessary adjuncts. It was only after a number of fires that the authorities found it necessary to formulate regulations governing the use of projectors and film in order to protect the public.

In paragraph nine he calls attention to the burning of a boys' school in Baltimore. From his statement the reader could infer that it would be perfectly permissible to use a motion picture machine without a booth, but as a matter of fact it was only owing to the ability of the owners to prove that the fire emanated from another source, that collection of insurance was made possible.

In paragraph ten: Does Mr. Jenkins expect anybody to believe that the reason for the use of fireproof booths is in order to conceal the operator? You must put a lion

in a cage in a zoological garden, but you do not put this cage around the lion to conceal him, but as a protection to the public. The same thing holds good in an elevator; the walls of an elevator not serving to conceal the people, but to protect them from contact with the receding walls of the shaft and to keep them from falling out. The fireproof booth is what its name implies—fireproof—and is intended to confine the films within the booth itself, so as to protect the audience in the auditorium.

The Fulton Supply Company, of Chicago, have just issued a circular, in which they state as follows: "An explosion of film at the Liberty Theatre, Sioux Falls, S. D., last week proved fatal to the motion picture operator. Cause of the accident is not known. The theatre was operated by C. C. Sawyer, of that town. The only damage incurred on the theatre was within the booth, the operator having remained at his post to quench the conflagration. Both machines were put out of commission and the entire inside of the booth damaged."

Here is an example of the value of the fireproof booth. What might have happened had this booth not intervened as a protection to the audience in that theatre?

In paragraph eleven Mr. Jenkins cites a report from the National Fire Protection Association, that more than fifty per cent, etc. Why not also inform the public, since he desires to bring out the Facts, that the National Fire Protection Association also sent out a motion picture film hazard warning, in which they stated as follows: "The nitro-cellulose motion picture film is of the character of GUN POWDER. This is the highly inflammable film in common use in motion picture houses, in which a SPECIAL FIRE-RESISTIVE BOOTH is required for public safety. The demand for motion pictures in Liberty

Bond, Red Cross, charitable and educational campaigns, in places in which THE SAFETY BOOTH IS NOT PROVIDED, is increasingly endangering life in the United States. These inflammable films are being handled, cared for and displayed in places by persons who do not understand the danger that is present. Members are urged to give this hazard attention in their home cities and towns and where motion pictures are to be displayed for any special purpose outside of regular motion picture theatres, TO MAKE SURE THAT THE PICTURES TO BE SHOWN ARE ON SLOW-BURNING STOCK." The words in capital letters were printed so by the Association and not by myself. The preceding was signed by Franklin H. Wentworth, Chairman of the Committee on Public Information, and the circular in question was dated September 1st, 1918. I have a copy before me and any one who so wishes can obtain one by writing to the National Fire Protection Association, 87 Milk Street, Boston, Mass.

In paragraph twelve attention is called to the fact that no fires ever cited were caused by boothless machines. I have cognizance of one such fire per week for the past year. I have several portable machines of various makes, which have been through such fires. I have several statements by users as to how the fires occurred. Any motion picture man catering to the non-theatrical field does know of such fires, or he certainly cannot be engaged in the industry in any great extent.

In paragraph thirteen the fact that the law has been broken during the war, or at other times, does not in any way affect the statement and the opinions held by those qualified to know that inflammable film is dangerous when not used under proper conditions.

In paragraph fifteen Mr. Jenkins contends that the narrow width film does not offer protection and cites the possibility of an unscrupulous manufacturer manufacturing this width from inflammable stock. I do not claim that it would be impossible to manufacture any width film in inflammable form, but Mr. Jenkins is speaking of a future possibility while we are dealing with the present condition. Certainly, some unscrupulous manufacturer could put out narrow width film on inflammable stock, but in doing so he would have but one object in view, and that would be to destroy the only safeguard which is offered to the public. I think that any manufacturer attempting such a thing could and would be easily dealt with. However, should this be done, new laws and regulations could be formulated, shutting off the narrow width industry entirely, leaving us no choice whatsoever but to discontinue the use of motion pictures, except under the same conditions now existing in the theatres. Personally, I am perfectly willing to take my chances in the matter and suffer the consequences of the act of any one committing the crime suggested.

Paragraph seventeen merits consideration. No one regrets more than myself the necessity which compels the use of a second standard. There appears to be no choice, however. Inflammable film has no place in a schoolroom filled with children. It has repeatedly demonstrated its hazardous qualities. I grant you that many prominent men agree not only with Mr. Jenkins, but myself, that the use of differing width film is awkward. Any time any one else can offer a better solution than that of the narrow width Safety Standard, I am willing to adopt it. So far, the arguments have been destructive rather than constructive and I cannot, myself, think of a better plan

whereby motion pictures may be safely used under the conditions.

The citation of opinions by several educators are certainly not conclusive because I cannot conceive that any of the men of such standing would commit themselves wilfully on anything which would bring danger into a schoolroom, of all places unless they had only been half-informed, which is unquestionably the case.

Mr. Jenkins goes on, after the quotation of Mr. Ellis, to state that ALL government film is on standard reels. This is an untruth, as much of the government material is already on Safety Standard and arrangements have just been made whereby a great deal of the balance is to be transferred in order to become available for portable projectors.

In regard to the use of acetate cellulose for all film, would state that I hold the same opinion as Mr. Jenkins; that when the question was brought to the attention of the Society of Motion Picture Engineers I myself seconded this motion and was heartily in favor of it. It was at my request that Mr. Pierce wrote the form in which an appeal was made to the government that in the future all government material be put on acetate cellulose stock. It has repeatedly been stated that I have been fighting this move and that I am fighting the use of safety stock for standard film. On the contrary, I shall be glad to see it come into universal use and if there was only a method whereby present existing inflammable reels could be removed from circulation, there would be no need for the Safety Standard.

The chief objection to the narrow-width machine is the fact that it limits the available list

of films to such as are printed in that special width. Safety film producers have never assembled a library of prints entirely adequate to *all* of the non-theatre demands. To be sure, there are actually thousands of safety film subjects in existence, but even that number fails to satisfy in many cases—not by any means in all cases.

Furthermore, the narrow width library is never up to date—except perhaps on scientific and scenic material. Dramas, when they reach the safety films are almost inevitably ancient and out of date. They have been shown in theatres through the country before being sold to the narrow-tread manufacturers. Dramatic films, with popular stars, are too expensive to produce exclusively for safety film service. The profit for such productions must be obtained first from the theatres; and theatres will not ordinarily book such films *after* being released in schools and churches on the narrow tread. It follows that the most popular films do not reach the narrow-tread exchange until after most people have seen them.

For the classroom, however, the narrow-tread machine is the logical purchase. A fair library of films for actual teaching purposes is now in existence, owned by Pathescope Co. It has been carefully assembled, and is being added to constantly. The films are, for the most part, adequate in treatment, and good in technic. The Pathescope machine throws an excellent picture on the screen

—as good as that of many of the larger machines.

The prospective exhibitor should consider both sides of the question before purchasing a machine. If he finds that the non-flam list is adequate and suitable to his particular needs, and if his funds are few, let him by all means install that type of projector. The films actually available, and the service, are the determining factors. A good machine, no matter how cheap it is, can not be considered a bargain, unless there is good film service immediately at hand.

There is, however, no middle ground between the Safety Standard machine, without a booth, and the Standard tread projector, *with* a booth. To be sure, there are many small standard projectors, now used without a booth, and using inflammable film. This is a flat violation of the law in practically every state of the Union. Furthermore, it is an exceedingly dangerous practice, and it is bound to cause a terrible accident some day. Safety first, last and always—there is no middle ground!

CHAPTER XVIII

PROJECTORS, SCREENS, BOOTHS AND SUPPLIES

It is not within the province of this volume to list *all* of the projectors, booths, screens and miscellaneous equipment now on the market. That is the work of the trade directories. Furthermore, such lists have only a brief value. On the other hand, there are certain standard products, now on the market, which the prospective exhibitor should have in mind when planning his installation. Our volume would not be complete unless it placed in his hands a classified list of the most important of these products.

Of the making of projectors there is no end. Among the 1129 machines listed in Extension Leaflet No. 1, U. S. Bureau of Education, there are about 40 different makes. Many of them are no longer on the market; others are in a state of innocuous desuetude. Only a few survive. Projector companies are only a little less ephemeral than film companies. Nevertheless, there are certain projectors which are standard and sterling; and which are likely to be sold for years to come. It is only such that we have listed. They fall

under about five general groups, viz., standard professional machines; light standard; semi-portable; suitcase and narrow tread.

STANDARD PROFESSIONAL

The machines mentioned in this group are of the maximum proportions necessary to project a picture at any required distance, and of any dimensions demanded by the largest modern motion-picture theatre. For permanent installation, where the machine is not to be moved, these projectors are the logical purchase. They will guarantee an absolutely steady, flickerless image on the screen, and will last for years. They are certainly the cheapest in the long run.

The prices quoted were in effect when this was written. It is exceedingly unlikely that they will be in effect six months from now. They are subject to numerous fluctuations. They are quoted merely as an approximate guide to the costs.

SIMPLEX PROJECTOR

PRICES

Hand-driven Machine with Incandescent Lamp Equipment (not including Transformer or Lamps), $425.00.

*Motor-driven Machine with Incandescent Lamp Equipment (not including transformer or Lamps), $495.00.

(*NOTE—Price of Motor-driven Machine is based on equipment with 110 or 220 volt Motor, for either direct current or 60-cycle alternating current.)

Mazda C Incandescent Lamps, 600 Watt, $6.00 each.
Mazda C Incandescent Lamps, 900 Watt, $6.75 each.

Rheostat, 110 Volts, adjustable 25 to 50 Amperes, $23.00.
(Prices of other types of Rheostats upon application.)

"Extralite" Shutter, two- or three-blade, for either Simplex or other standard makes of Projectors, $16.50.

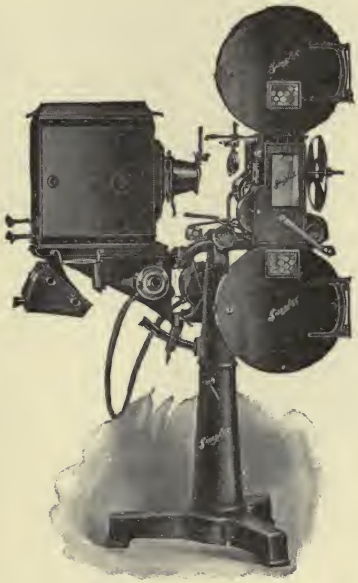
The prices given cover only the equipment and accessories generally used. Additional charges are made for motor equipments adapted to the Massachusetts regulations and for lamphouses as required for Chicago.

Prices on any special equipment, such as Projectors with aluminum pedestal, for Traveling Equipments, will be quoted promptly upon request.

For the omission of any part of the regular equipment of Projectors an allowance of 50% of the list price will be made.

MANUFACTURED BY

PRECISION MACHINE COMPANY
317 E. 34TH ST., NEW YORK CITY



SIMPLEX PROJECTOR

POWERS 6B CAMERAGRAPH

PRICE

6B Cameragraph for Hand Drive, Including Lenses, Reels, Rewinder and Floor Sockets, $417.00.

Additional Charge For

Motor, Motor Attachment and Mechanical Speed Control.

For Direct Current
32-60-70-80 or 110 Volt, $58.00.
125-220 or 250 Volt, $63.00.

For Alternating Current
110 Volt, 60 Cycle, $58.00.
220 Volt, 60 Cycle, $63.00.
110 Volt, 25-40-50 or 133 Cycle, $68.00.
220 Volt, 25-40-50 or 133 Cycle, $73.00.

Manufactured by

NICHOLAS POWER COMPANY

INCORPORATED

88-90 GOLD STREET, NEW YORK, U. S. A.

CABLE ADDRESS: NICPOWER

POWERS 6B

LIGHT STANDARD MACHINE

POWER'S 6A CAMERAGRAPH

LIST OF PRICES

6A Cameragraph for Hand Drive, Including Lenses, Reels, Rewinder and Floor Sockets, $367.00.

Additional Charge For

Motor, Motor Attachment and Mechanical Speed Control.

For Direct Current
32-60-70-80 or 110 Volt, $58.00.
125-220 or 250 Volt, $63.00.

For Alternating Current
110 Volt, 60 Cycle, $58.00.
220 Volt, 60 Cycle, $63.00.
110 Volt, 25-40-50 or 133 Cycle, $68.00.
220 Volt, 25-40-50 or 133 Cycle, $73.00

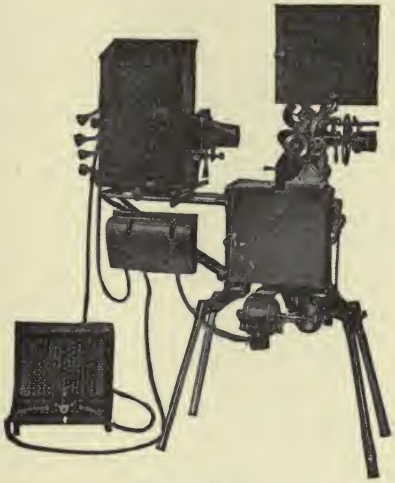
Manufactured by

NICHOLAS POWER COMPANY

INCORPORATED

88-90 GOLD STREET, NEW YORK, U. S. A.

CABLE ADDRESS: NICPOWER



POWERS 6A

SEMI-PORTABLE MACHINES

THE GRAPHOSCOPE JUNIOR

LIST PRICES

Graphoscope Junior with 32 volt motor, either 900 or 600 watt lamp, $395.00.

Graphoscope Junior with 110 volt 1,000 watt lamp, either A. C. or D. C. motor, $395.00.

Graphoscope Junior with 110 volt D. C. motor and rheostat for 20 ampere 30 volt lamp, $420.00.

Graphoscope Junior with 110 volt A. C. motor and transformer for 20 ampere 30 volt lamp, $425.00.

Graphoscope Junior with 110 volt D. C. motor and rheostat for 30 ampere 30 volt lamp, $430.00.

Graphoscope Junior with 110 volt A. C. motor and transformer for 30 ampere 30 volt lamp, $437.00.

Graphoscope Junior with 220 volt D. C. motor and 220-30 volt 30 ampere rheostat, $500.00.

Graphoscope Junior with 220 volt A. C. motor and 220-30 volt 30 ampere transformer, $449.00.

Extra 600 watt lamps, $6.00 each.

Extra 900 watt lamps, $6.75 each.

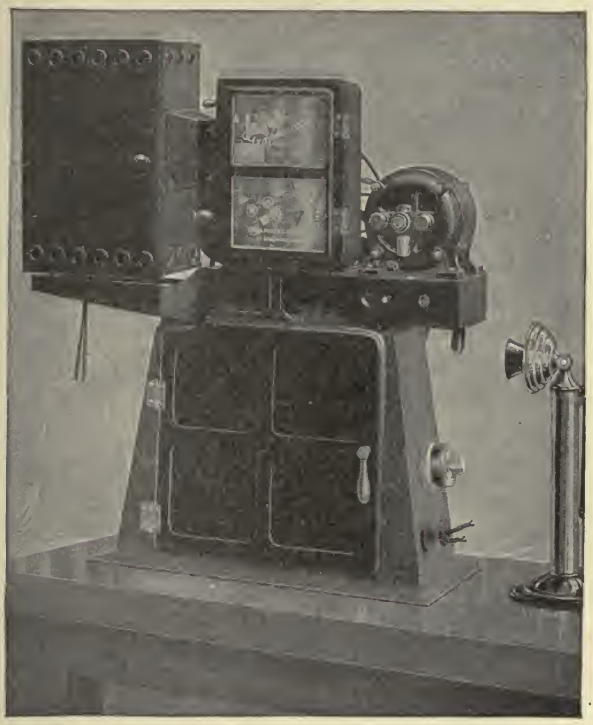
Extra 1,000 watt lamps, $8.00 each.

All prices f. o. b. factory Newark, N. J.

Comes ready to use. Requires no assembling. In ordering be sure to give full current data, size of screen and distance from machine to screen.

GRAPHOSCOPE DEVELOPMENT COMPANY

49 MECHANIC ST., NEWARK, N. J.



GRAPHOSCOPE

ZENITH SAFETY PROJECTOR

PRICES

Model B-1, equipped with hand and motor drive, motor speed controller, stereopticon and lamp, f. o. b. factory, $298.00.

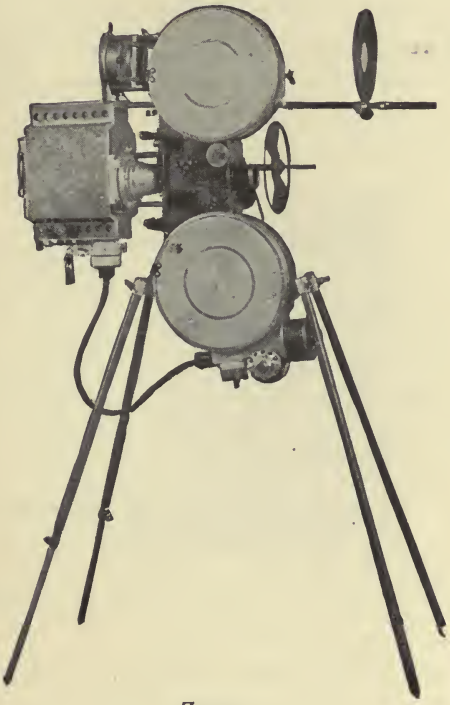
Model B-2, equipped same as Model B-1, except it has no stereopticon, f. o. b. factory, $273.00.

Zenith without motor or stereopticon, equipped with hand drive only and lamp, f. o. b. factory, $233.00.

Be sure and give distance from machine to screen as well as size of picture desired.

RUTLEDGE & COMPANY

35 SOUTH DEARBORN ST., CHICAGO, ILL.



ZENITH

SUITCASE MODELS

The law demands a fireproof booth for a suit-case machine, the same as for the larger models. Many schools and churches use suit-case projectors *without* booths. This is an extremely dangerous practice. More of these machines are sold than any other type, and there is every reason to believe that few of them are housed in fireproof booths.

These machines should be used with extreme care—not carelessly, with the operator at a distance; and above all things, they *must* be housed in a regulation fire-proof booth.

The machines listed below are among the best on the market, and are claimed to be safe by the manufacturers.

THE "ACME" PORTABLE PROJECTOR

NET PRICES

Machine complete ready for use, including: 1 Reel, 15-ft. Cord with Edison attachment Plug, 110-Volt 400-Watt Lamp and 110-Volt D. C. and A. C. Motor for 25 to 60 Cycles operation without readjustment, $180.00.

Same as above for 220 Volts, $210.00.

Same with 30-Volt 20-Amp. 600-Watt lamp, $200.00.

Same with 6-Volt Storage Battery lamp (without Battery and Motor) hand drive only, $160.00.

Extra 110-Volt 400-Watt lamps, life about 200 Hours, $6.00 each.

Extra 30-Volt 600-Watt lamps, life about 100 Hours, $7.00 each.

Extra 6-Volt lamps for Storage Battery, operation life about 50 Hours, $2.50 each.

DESCRIPTION: The accompanying illustration gives an internal view of the Machine which m .sures 17″ long, 18″ high, 7¾″ wide and weighs only 22 pounds. The Machine is enclosed in a fire-proof substantial asbestos-lined case of the above dimensions covered with black leather and provided with leather carrying strap and water-proof black cover to slip over the entire Machine, making a substantial and handsome outfit. One side of the case swings open giving full and free access to every part of the Machine.

The ACME Projector is made for the standard 10″ diameter reel and uses either the standard non-inflammable or inflammable film in any length up to 1,000 feet.

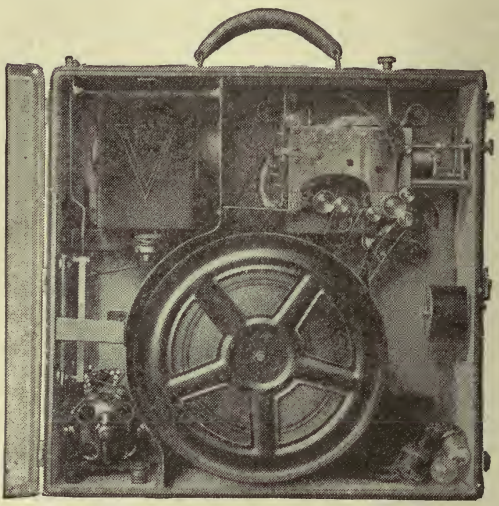
ACME

SOLD BY

UNITED THEATRE EQUIPMENT CORP.
25 W. 45th. St., N. Y.
BRANCH STORES IN MANY CITIES
See page 270

THE DEVRY PORTABLE PROJECTOR

Type E, complete ready to operate. Price, $250.00 each.
Type U, complete ready to operate. Price, $250.00 each.



DEVRY

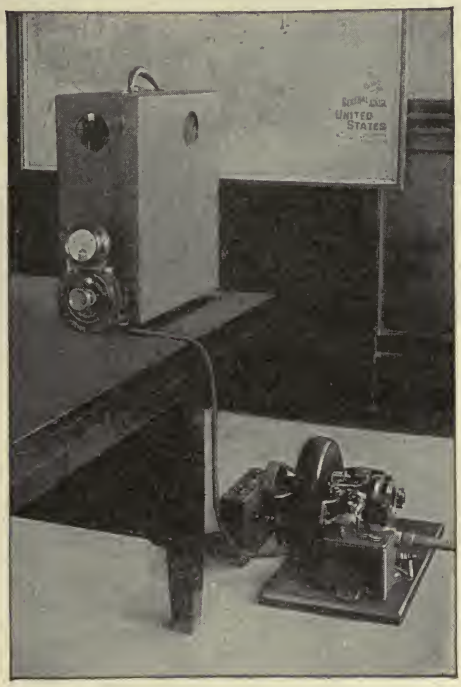
DEVRY CORPORATION
1248 MARIANNA STREET, CHICAGO, ILL.

HALLBERG

"FEATHERWEIGHT" PORTABLE PROJECTOR AND ELECTRIC PLANT

In out of the way places where there is no electricity, we recommend the use of the Hallberg Unit.

It is composed of an excellent little projector and a complete power plant. The weight of the projector is 25 pounds and the power plant 90 pounds. Price for the complete outfit, $500.00. It is for sale at the various offices of the United Theatre Equipment Corporation.



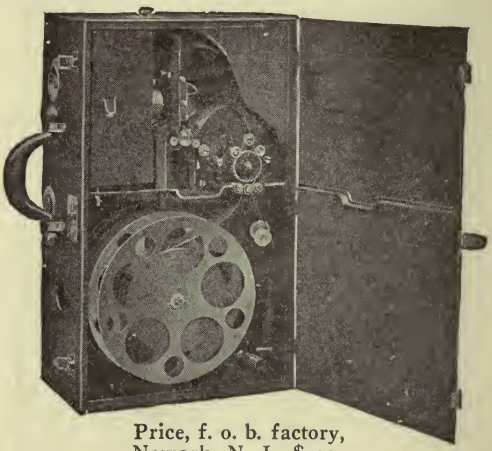
OFFICES OF THE UNITED THEATRE EQUIPMENT CORP.

Main Office: 25 W. 45th St., New York.

Branches: 26 Piedmont Street, Boston, Mass.; 514 S. Wabash Avenue, Chicago, Ill.; 714 Huron Road, Cleveland, Ohio; 524 Broadway, Cincinnati, Ohio; 145 E. Elizabeth Street, Detroit, Mich.; 510 Produce Exchange Building, Minneapolis, Minn.; 729 7th Avenue, New York; 116 So. Hudson Street, Oklahoma City, Okla.; 13th and Harney Streets, Omaha, Nebraska; 1233 Vine Street, Philadelphia, Pa.; 1006 Forbes Street, Pittsburgh, Pa.; 3334 Olive Street, St. Louis, Mo.; Kansas City Machine and Supply Co., 813 Walnut Street, Kansas City, Mo.

GRAPHOSCOPE

Portmanto



Price, f. o. b. factory, Newark, N. J., $300.

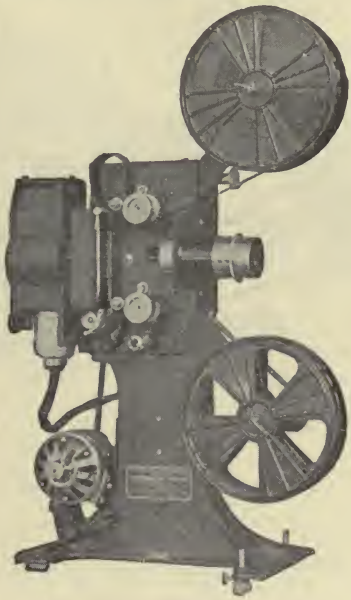
GRAPHOSCOPE DEVELOPMENT COMPANY
49 MECHANIC ST., NEWARK, N. J.

Intermittent of Geneva Type. Large diameter, three-blade shutter; outside type. High grade,

large diameter projecting lens. Aluminum castings, bearings bushed with bronze. Lateral projection—Film in vertical alignment in head.

Ground tool steel shafts. Mechanism inclosed, fire rollers at entrance and exit of film from mag-

NARROW TREAD MACHINES
VICTOR SAFETY CINEMA

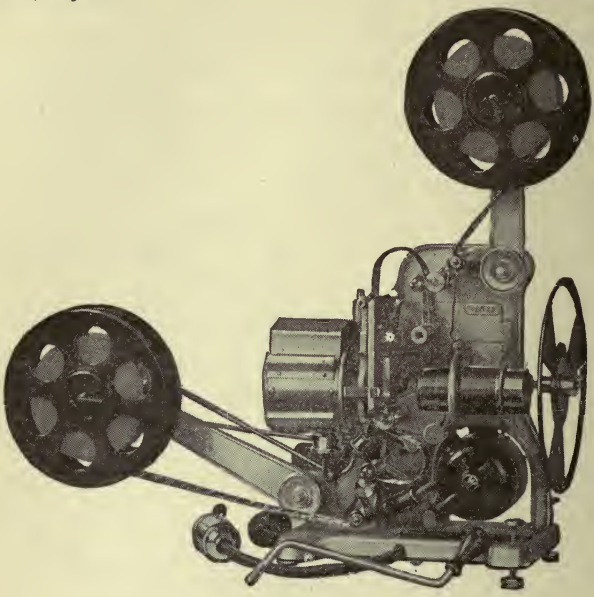


Victor Safety Cinema, equipped with 6 amp. Rheostat and motor for 110-120 volts, A. C. or D. C., and carrying case and extra lamp, $275.00.

FOR SALE BY
UNITED PROJECTOR AND FILM COMPANY
GENERAL OFFICES
69-71 W. MOHAWK STREET., BUFFALO. N. Y.

PATHESCOPE

Price, $290.00.



MADE BY
PATHESCOPE CO. OF AMERICA
33 W. 42ND ST., N. Y. C.

SCREENS

azine. Standard 1,000 foot reel. Both reels in lower compartment, below line of light. Take-up double cone type, simplest in use today. Carrying case of Bakelite, durable and dampproof.

There are innumerable screens on the market. Each maker claims that his brand is the best. The truth of the matter is that almost any screen will give a good picture, but certain types of

screen are better under certain conditions. If the audience is concentrated squarely in front of the screen, use a metallic-coated material; but, if the audience is in a wide semi-circle, with many people at the extreme edge, white cloth will give the best results. The metallic gives the more brilliant image, but it tends to reflect the picture at a sharper angle than does the cloth. The latter diffuses the light, and shows a more uniform image all over the screen.

Perhaps the most extensive line of good screens is offered by C. S. Wertsner & Son, 211-221 North 13th St., Philadelphia, Pa. The following list is from their catalogue. Prices are, of course, constantly fluctuating, and the quotations are merely approximate.

The quotations include boxing for shipment.

When ordering, give length and width of the hall, length and angle of throw, and distance of front seats from the screen.

When screens are mounted on spring rollers and backboards, the backboards have screw eyes; and the brackets for the spring rollers are fastened to the board, so that the screen can be transferred from place to place and quickly hung in proper position.

Wall brackets are furnished for spring roller screens unless otherwise specified. If the screen is to be hung from the ceiling, that fact should

be stated in ordering, and ceiling brackets will be supplied.

Screens for frames are always made to give projection surface of size ordered. For example, if 12x16 is ordered, the screen and frame are made large enough to give projection surface of 12x16 in the clear after the screen is stretched on the frame.

Screens can be recoated from time to time when the surface cracks or becomes dull.

WERTSNER'S
WHITEBACK SILVER SCREENS

Adapted for churches, schools, colleges, private residences, etc. Gives a similar picture to the Greenback.

A particularly good screen for Stereopticons; also motion pictures.

Size	Wood Rollers		Spring Roller without Backboard	Spring Roller with Backboard
4½ x 6.....	$ 8.00	1¼".....	$13.00	$14.00
6 x 6.....	11.00	1½".....	14.50	15.50
7 x 7.....	15.00	1¾".....	20.00	21.00
6 x 8.....	17.50	1¾".....	22.50	24.00
8 x 8.....	20.00	1¾".....	26.00	27.50
8 x 8.....	....	2¼".....	31.50	32.50
9 x 9.....	29.00	1¾".....	35.00	36.50
9 x 9.....	....	2¼".....	41.00	42.50
8 x 10.....	29.00	2¼".....	44.50	46.50
10 x 10.....	33.00	2¼".....	46.00	48.00
9 x 12.....	38.00	3".....	70.00	72.50
10 x 12.....	42.00	3".....	74.00	76.50
12 x 12.....	50.00	3".....	80.00	82.50

All sizes to and including 12 x 12 same price without wood rollers as quoted with wood rollers.

Larger sizes than 12 x 12, 45c. per sq. ft.

Same price for black borders as quoted on the Greenback.

Larger sizes on spring rollers quoted upon request.

WERTSNER'S

PLAIN WHITE COATED SCREENS

Size	Wood Rollers		Spring Rollers without Backboard	Spring Rollers with Backboard
6 x 6	$ 8.00	1½"	$10.00	$11.00
7 x 7	11.00	1¾"	13.00	14.00
8 x 8	15.00	1¾"	20.00	21.50
9 x 9	20.00	1¾"	26.00	27.50
10 x 10	25.00	2¼"	35.00	37.00
12 x 12	36.00	3"	60.00	62.50

We make these screens in any size. Sizes not listed above, quoted upon request.

WERTSNER'S

SATEEN SCREEN

Size	Price
6 x 6	$ 6.50
9 x 9	15.00
12 x 12	23.00

Sateen is as nearly opaque and highly reflecting a material as can be obtained which at the same time will fold very compact and suitable for carrying in a case or grip. These screens have eyelets for stretching and the top, bottom and sides are reinforced.

WERTSNER'S
SUPER-LITE GOLD AND SILVER SCREENS

PRICES

(You are not obliged to buy the frame)

Size	Screen	Frame
6′ x 8′	$ 38.40	$25.00
6′6″ x 8′6″	44.20	30.00
7′ x 9′4″	52.27	30.00
7′6″ x 10′	60.00	30.00
8′ x 10′	64.00	32.00
8′ x 10′8″	68.27	32.00
8′6″ x 11′4″	77.07	35.00
9′ x 12′	86.40	35.00
9′6″ x 12′8″	96.27	35.00
10′ x 13′4″	106.67	40.00
10′6″ x 14′	117.60	40.00
11′ x 14′8″	129.07	40.00
11′6″ x 15′4″	141.07	40.00
12′ x 16′	153.60	40.00
12′6″ x 16′8″	166.67	45.00
13′ x 17′4″	180.27	47.50
13′6″ x 18′	194.40	47.50
14′ x 18′	201.60	47.50
14′6″ x 19′4″	224.27	55.00
15′ x 20′	240.00	55.00

Super-Lite Screens are made any size, price, 80c. square foot.

The special Stretcher Frames are strongly constructed, hand made, put together with bolts and lag screws, and can be assembled without any trouble. The screen is stretched with four tension strips so it can be made drum-tight and have the appearance, when finished, of a large beveled-edge mirror.

Typewritten instructions on "How to Put the Frame Together and Stretch the Screen" sent with each order.

WERTSNER'S
SPECIAL SILVER SCREENS

Give a soft white clear picture, especially easy on the eyes, and are made for those who do not want quite as bright a picture as the Super-Lite gives.

Price 60c. per sq. ft.

Cost of frames same as listed for Super-Lite.

This screen is adaptable for spring or wood rollers.

Price on application.

WERTSNER'S
GREENBACK SILVER SCREENS

Give a bright clear picture and a high-grade screen for the price. Adapted for theatres, churches, schools, private residences, etc., where they want a good screen for motion pictures.

Size	Wood Rollers		Spring Roller without Backboard	Spring Roller with Backboard
4½ x 6	$ 9.00	1½"	$14.00	$15.00
6 x 6	12.00	1½"	16.00	17.00
7 x 7	17.50	1¾"	22.00	23.00
6 x 8	20.00	1¾"	25.00	26.50
8 x 8	23.00	1¾"	29.00	30.50
8 x 8	....	2¼"	34.50	35.50
9 x 9	32.50	2¼"	45.00	46.50
8 x 10	32.50	2¼"	48.00	50.00
10 x 10	38.00	2¼"	52.00	54.00
9 x 12	43.00	3"	77.00	79.50
10 x 12	48.00	3"	82.00	84.50
12 x 12	57.00	3"	89.00	91.50

All sizes to and including 12 x 12 same price without wood rollers as quoted with wood rollers.

All sizes larger than 12 x 12, 50c. sq. ft. either with or without wood rollers.

25c. extra for black borders on 54 x 72.

50c. extra for 6 x 6 to and including 8 x 6.

75c. extra to and including 12 x 12.

Larger sizes on spring rollers quoted upon request.

WERTSNER'S
WHITE MUSLIN SCREENS

Size	Price	Size	Price
6 x 6	$ 4.00	14 x 14	$20.00
7 x 7	5.25	15 x 15	24.00
8 x 8	7.00	16 x 16	26.00
9 x 9	8.75	18 x 18	34.00
10 x 10	10.50	20 x 20	42.00
12 x 12	15.00	24 x 24	60.00

Muslin screens are made of heavy white muslin and have invisible seams butted together and stitched by special machine.

The top, bottom and sides are turned over, reinforcing the edges and have rings conveniently placed for stretching.

These screens are generally selected for their economy and compactness for traveling.

WERTSNER'S

DUST PROOF SCREEN CASES

Size	Price
6′	$22.75
7′	24.75
8′	27.00
9′	29.00
10′	32.00
12′	34.00

Screen cases are made for screens on spring rollers so screen can be rolled out of sight when not in use.

They are well made and nicely finished in oak, mahogany, cherry, white or any color desired. They are desirable for fine residences, halls, etc., so screen can be rolled out of sight and not be objectionable when not in use.

For quartered oak 10% additional.

Prices include crating for shipment.

FIRE-PROOF BOOTHS—PORTABLE

ASBESTOS, price, $200.00 and up.

made by

JOHNS MANVILLE COMPANY

Offices in every large city in America.

SHEET METAL, price, $200.00 and up

made by

GEORGE HOWARD, INC.

Mount Vernon, N. Y.

MISCELLANEOUS EQUIPMENT

Fire extinguishers, rewinders, film repair outfits, empty reels, film cement, empty reel boxes and, in fact, everything necessary for motion picture projection from the smallest tool to the whole projection machine, and even electric light plants can be obtained at

UNITED THEATRE EQUIPMENT CORP.,

25 W. 45th. St.

New York City

Branch offices—New York, N. Y., 729 Seventh Ave.; Boston, Mass., 28 Piedmont St.; Philadelphia, Pa., 1233 Vine St.; Pittsburgh, Pa., 940 Penn Ave.; Cincinnati, Ohio, 115 W. 7th St.; Detroit, Mich., 57 E. Elizabeth St.; Omaha, Neb., 13th and Harney Sts.; Minneapolis, Minn., 16 N. 7th St.; Cleveland, Ohio, Columbia Bldg.; Chicago, Ill., 514 S. Wabash Ave.; Kansas City, Mo., K. C. Machine & Supply Co. Inc., 813 Walnut St.

There are other reliable supply houses in every city.

CHAPTER XIX

HANDLING AND CARE OF FILM

PROPER handling and care of the film is necessary if the exhibitor is to achieve smooth presentation, and a clear, brilliant image on the screen. The problem has two principal aspects: mechanical and legal. In a previous chapter we considered the legal requirements, and the safety regulations. In this chapter we shall present the mechanical problems. The exhibitor should know the chief characteristics of motion-picture film; common damages; and how to avoid them; repairs; leader; trailer; cuts; inspection; where to keep films; cleaning, and similar facts.

Film is of two kinds: inflammable and non-inflammable. The former is indeed highly inflammable; the latter is not actually *non*-inflammable, but it is slow burning. It is commonly called "non-flam." When heat first strikes non-flam stock, it blisters and shrivels. If the heat is of sufficient temperature, and is applied steadily for a few seconds, the stock will sputter and burn slowly. Inflammable stock, on the other hand, when great heat or flame strikes it, flares up in a flash, and burns almost like gunpowder. Non-

flam is made of acetate cellulose, while inflammable film is nitrate cellulose. Both kinds of film are coated with a photographic emulsion. It is the emulsion which takes the photographic impression. The cellulose is merely a flexible base to carry the emulsion. Motion-picture film has practically the same chemical constituency as the film used in the ordinary pocket camera. It differs chiefly in the way it is cut and delivered.

Standard width film is 1⅜ inches wide by about $\frac{6}{1000}$ of an inch thick. Of the thickness, the emulsion consumes one thousandth of an inch. It is provided in negative and positive stock in 200 foot rolls. The original picture is taken on negative. It is then developed and printed on positive. Chemically, the emulsion on the negative differs a trifle from the emulsion coating of the positive, but it is the same in principle.

In appearance, a developed negative differs from a positive in that the lights and shadows in the former are the reverse of normal. In other words, in a negative, white appears black and black white, while the reverse is true in the positive. Almost any number of prints can be made from the original negative. This permits of showing the same motion picture subject simultaneously in every city in the country. It is not uncommon to make 200 prints for the "first run" of a popular picture. Mary Pickford can be seen in the same picture all over the world on the same night.

Narrow-width film is a general term for any width less than standard—1 3/8 inches. The most common narrow size is 1 1/8 inches, known as "Safety Standard." It is printed on non-flam film stock with the purpose of escaping the fire restrictions. This type of film is about as efficient as the standard; that is, it will throw as clear an image. On the other hand, owing to the small size of machine, and weaker lighting system, the size of image produced by the narrow width in practice is somewhat smaller than the image possible with standard film in a large machine. Most of the problems of care and handling film apply to both the narrow and the standard-tread films.

In taking a motion picture, the negative stock is placed in a camera having an intermittent movement, revolving shutter and lens very similar in action to those of the projection machine. Of course the motion-picture camera mechanism is inclosed in a light-tight box or casing. Each three-quarters of an inch of the film is successively exposed to the light, and a "snap shot" photograph is impressed thereon. These individual pictures are taken at the rate of 16 per second.

After exposure, the negative is developed, fixed and dried like the ordinary camera negative. Being 200 feet long, the mechanical methods are different, but the chemical action is the same. A great many of these 200-foot strips must be taken

to produce a finished picture. There are 1,000 feet in a single reel. The average feature picture is 5 reels in length. In taking the "shots" or scenes, a great deal of film is consumed before a satisfactory shot is obtained. It is not uncommon to shoot 100,000 feet of negative for a complete feature production. This 100,000 foot assembly of shots must be cut down to 5,000 feet.

The positive film is printed from the original negative before the negative is cut. The cutting is done on the first positive. After the picture is successfully cut and assembled, the negative is cut, exactly like the positive. From this final negative, the future positives are made.

The printing of the positive is accomplished by placing the negative in the printing machine in contact with a strip of positive film, and by means of an intermittent movement and revolving shutter, but without a lens, is exposed to artificial light of definite power. Each picture is exposed only a fraction of a second. Printing is done at about half normal speed of the camera.

There are 64 perforations to the foot on both sides of standard film. Upon the extreme accuracy of these perforations depends in large measure the steadiness of the picture on the screen. Careless drying, or inequality in the thickness of the film, resulting in uneven shrinkage, may cause irregular perforations. They in turn cause bad

framing, and tearing of sprocket holes. "Framing" means bringing each individual picture squarely in front of the aperture. If it is out of frame, the frame line, or dividing mark between pictures, appears on the screen, showing part of the picture above and part below the line. A device on the projection machine enables this difficulty to be removed instantly by turning a screw, which causes the image to appear squarely in the aperture.

Damage to the positive film is due to (*a*) ordinary wear, (*b*) improperly adjusted projection machine, (*c*) worn sprocket teeth, (*d*) too much pressure by the tension shoes of the projector, (*e*) burning, (*f*) careless patching, (*g*) brittleness, (*h*) oil, dirt, etc., (*i*) imperfection in manufacture. Negatives are not subject to such damage because they are not run through the projection machine. They will keep for years in a safe, provided they are wound up tightly—*not* on a metal reel—wrapped in paraffine paper, placed in a wooden box and kept at normal temperature and normal humidity.

Ordinary wear develops in proportion to the number of times a print runs through a projection machine. At first the print is smooth, clean and transparent. The first showings are the best. Gradually it develops scratches, making the image on the screen look "rainy." The rain marks are scratches in the emulsion which have filled with

dirt, thus becoming more or less opaque, and showing dark on the screen. Furthermore, the sprocket holes gradually wear larger, and will not hold; the flexibility of the film diminishes, and in the course of time ordinary wear puts the print entirely out of commission. A print should last for about 100 showings in ordinary use. Some prints run 300 times; and a record of 1,000 is claimed. All these figures may be disputed, depending upon the personal experience of the observer. The vagaries of machines and operators are so numerous that the life of a print is at best extremely hazardous, and longevity is largely a matter of good luck.

Improperly adjusted projection machines cause numerous disasters to prints. The possible damage from this cause extends from a simple tear, which can be promptly patched, to a heavy scratch running the whole length of the film, and destroying its value utterly. In this case, the take-up tension is the chief source of trouble. Irregular tension often originates in the rewinding of the reel with one portion tighter than another.

The sprocket holes are often damaged by undercut and hooked sprocket teeth. Constant usage wears a tiny depression at the base of the sprocket teeth. The film hooks into these depressions, and is torn. These teeth do all of the work of pulling the film against the friction of the tension shoes and are therefore subject to heavy wear. As soon

as appreciable wear is observed, turn the sprocket end for end, and thus present a new tooth surface to the film.

Burning of the film is a rare accident with the modern projector. Nevertheless, despite the automatic cut-off, it sometimes happens that a hole is burned through the film at the aperture, where the light strikes it. This is not a serious damage because only a small area is consumed before the fire rollers extinguish the flame.

Careless patching, or excess of cement cause much damage. Patches in which the sprocket holes are not accurately matched will climb the sprocket teeth, causing loss of loop, or will cling to the teeth of the sprocket, and wind around it. On new films the emulsion and cement sometimes collect on the polished surface of the tension shoe in a hard mass, frequently injuring the film.

Brittleness is due to age, usage and exposure. It causes sudden breaks and torn sprocket holes. It can be avoided or remedied by treating the film in a glycerine bath, and in other ways. However, this must be done by experts, and is usually impracticable for the exhibitor to attempt. It is the duty of the exchange to keep the film in good physical condition—a duty which the exchange almost invariably ignores. Films are easily mended when the damage is confined to isolated parts, but bad scratches, brittleness and other conditions run-

ning the whole length cannot often be repaired—at least not by the motion-picture operator.

When a film breaks apart, or is cut apart, it can be patched by cementing the ends together. It is often necessary for the operator to do this before running the film through the projector. For this reason he should be fully prepared to make patches promptly.

Richardson's directions for making a patch may be taken as representing the widest experience on this important subject. He says, "To make a patch cut the film (end *A*) leaving a stub not less than 1/8 inch and no more than 3/16 of an inch in length. (By stub he means a part of the next picture.) The latter measurement is best as it will be found difficult for the operator, usually working in a hurry, to make a good patch only 1/8 inch wide; but if wider than 3/16 the patch will be stiff. End *B* should be cut exactly on the dividing line between the two pictures. Scrape every particle of emulsion off stub end *A*, and scrape about 1/8 inch on celluloid side of end *B* to roughen the celluloid and remove all dirt and grease. A very sharp knife is best to scrape with. Some use the blade of a safety razor. Be sure to thoroughly scrape end *B* and to scrape every particle of the emulsion off stub end *A*. Cement will not stick to emulsion. You must remember that the emulsion covers the entire film on one side, therefore

be careful to get it all off around the sprocket holes. This is where many make their error in patching film. They scrape the center of the stub and the center of the back of end *B*, but do not scrape thoroughly around the sprocket holes, *where the greatest strain will come.* In consequence their patches soon come loose around the sprocket holes and there is trouble. The stub should be scraped to a straight line, else there will be a flash of white light on the screen as the patch passes. It matters little whether patches are made . . . with one side or the other on top. If a patch is in good condition it will go through equally well either way it is made.

"Having scraped the ends clean as directed, place them together so that the sprocket holes exactly match, with the emulsion side of both ends either up or down—that is to say on the same side. (The emulsion side is distinguishable from the celluloid side by the fact that the former is dull, and the celluloid shiny.) Grasp one edge firmly with thumb and finger, and apply cement, with the cement bottle brush, to the other. Clamp the cement edge down tightly, being careful the sprocket holes exactly match, with thumb and finger of each hand releasing opposite edge. Apply cement to other edge and clamp that also, applying all the pressure you can for about ten seconds or so, and the patch is done. Every cement bottle should have a small brush attached

to the under side of its cork. When you buy cement accept none without the brush. It is put up that way now by many, and should be by all."

While it is possible to make cement by very simple formulæ, it is far safer and more practical to buy a small bottle at the nearest motion-picture supply house. Nevertheless, it may be well to know the two principal formulæ in case no supply house is convenient.

For non-inflammable stock mix one-half pound acetic ether, one-quarter pound acetone merch, and in this mixture dissolve six feet of non-inflammable film from which the emulsion has been scraped. Cut the film into small pieces before dissolving.

For inflammable film, scrape a piece of film three inches long, and dissolve it in one ounce of acetic ether. The emulsion must be carefully removed from the film surface; and then the film should be cut in very fine strips before placing in the ether.

The non-theatre exhibitor should make a practice of inspecting *all* reels before projecting them. While it is not exactly within his province to do so—inspection is the work of the exchange man—nevertheless experience shows the necessity of constant and careful inspection to detect breaks, and other conditions which might mar the showing. Furthermore, prints in educational use are often old. The non-theatre operator cannot often afford to rent new prints, or "first runs." He is

regarded by some exchangemen in the light of an " easy mark." They often send him " junk " film, discarded for theatre use. Inspection is therefore vitally necessary to insure unbroken presentation.

Inspecting is nothing more than slow rewinding, in the course of which, breaks in the film, loose patches, worn sprockets, and other troubles can be detected. If no damage exists, the inspection requires but a few minutes for each reel. If patching must be done, each patch takes about one minute.

Inspection and repair equipment should include a pair of rewinders, scissors, safety razor blades, cement and a special pliers for notching broken sprocket holes. A more elaborate outfit would include a film fault detector, a mending or splicing machine, and a metal rewind table. However, they are not necessary for the simple needs of the school or church. All of the necessary supplies can be purchased where you bought the machine—in all probability.

" Leader " and " trailer " are the strips of film at the beginning and end of the reel respectively. They are both of the same material—viz., opaque film, with just the frame lines indicated. Their purpose is to protect the main body of the print. Furthermore, the leader is also necessary for threading the machine—about 30 inches being required in the take up. In addition, the leader

permits the operator to frame the picture before the title appears. At the end of the last reel, a trailer permits the operator to stop the projector before the end of the film passes over the aperture. This avoids the sudden white light on the screen which causes an unpleasant shock and spoils the illusion for the audience.

Special leader in addition to the opaque strip, is often attached to the film for special purposes. Such leader usually carries a title, announcement, advertising matter, censor stamp, or other information, not a part of the subject-matter of the reel. Special trailer is used for the same purpose.

Objectionable parts of a film can be cut out for non-theatre showings. These deletions are known as "cuts." The legal, artistic and ethical questions raised by mutilating a motion picture by cuts would make interesting discussion, quite beside the point of this chapter. It should be said, however, that cuts are quite common in the theatre service, as well as for schools and churches, regardless of any possible legal objections. It is surprising how much film can be removed without injuring the sequence of the story. The exchanges will usually permit cuts, provided they are carefully replaced after the showing. The actual work of cutting and replacing requires nothing more than the ability to make good patches.

Films should be kept near the floor of the booth or operating room. The ceiling is likely

to be too warm. Provide a metal box with compartments for each reel, and a place below to hold sponge or water, to create humidity. The box can be purchased at a film supply store, and is a good investment. It does much to eliminate fire risk, and keeps the film in pliable condition.

In conclusion it should be remembered that the proper care and handling of film is of the first order of importance from at least three points of view. In the first place financial liability for damage incurred through careless handling is a serious matter. At least it may equal the cost of a print—say $50 a reel—and at most it may involve considerably more, depending upon penalty clauses in the rental contract. In the second place, a poor presentation is certain to result from uninspected film. Nothing marks the amateur exhibition as quickly as breaks in the film.

Lastly, there is an important ethical aspect involved. It means nothing more or less than "playing the game." Remember the next fellow who is to use the film. He expects to receive it in good condition; and he must receive it on time for his showing. Schools and churches are the first to complain over bad film; and yet they are the worst offenders. Exchanges hesitate to send a good, new print to a non-theatre exhibitor. Bitter experience shows that it is likely to be returned too late for the next exhibitor; and it is all too likely to arrive scratched and torn.

Proper care of film and prompt reshipment are vitally necessary in the film business. The non-theatre exhibitor is a new-comer in the field. If he is to receive the same service that is given to his theatrical brother, he must earn the right to such service by scrupulous attention to the simple but important details of handling and reshipment.

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